

~~NOUN PHRASE SENTENTIAL~~ COMPLEMENTATION IN IGBO

Thesis submitted for the degree of
Doctor of Philosophy

.By

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Abstract

Since a full appreciation of the part is not possible without an appreciation of the whole, we have considered it appropriate to supply the necessary background information to the main body of the thesis in Part I which, therefore, serves as an introduction to Part II.

Part I comprises three chapters: Chapter 1 situates the dialect of Igbo being described here and gives an overview of Igbo language studies up to the present moment, pointing out their relevance to the subject of our investigation here - Noun Phrase Sentential Complementation. In chapter 2, we establish the phonological and morpho-syntactic features of the dialect so as to make subsequent references to them easy, and also to draw attention to some fundamental differences between our dialect and that described by Green and Igwe (1963). The third and final chapter deals with Tone in Generative Phonology.

Part II consists of six chapters, 4-9. Chapter 4 gives the theoretical orientation of the thesis, identifies all the categories of Igbo Noun Phrase (NP) complements and argues for a deep structure generation of complementisers or the conjunctions functional in NP complementation. Chapter 5 deals with Indicative or Na complementation, the class of matrix (main clause) verbs involved, and provides syntactic evidence in justification of the factive - non - factive distinction as applied to Igbo. Chapter 6 examines the Interrogative or Ma₂ complements (that is, embedded Yes/No questions) and reaches the conclusion that the Igbo equivalents of embedded English WH - Questions are not instances of NP complements, but of relative clauses.

In chapter 7, we examine Imperative or Si complementation and show that the possibility of embedding imperative structures as NPs is due to the fact that the complementiser in this construction type is si,

a form of the verb isi - 'to say.' Chapter 8 is the last of these chapters on the mechanics of complementation, and its subject is the subjunctive or $Ka^{\backslash}/Ma^{\backslash}_1$ complementation; the fact that this is the only complement type that is subject to Equi - NP Deletion is an automatic consequence of the semantic features of the matrix verbs involved. The last chapter, 9, is rather discussive and speculative; its main concern is with how the description of languages such as Igbo might contribute to linguistic theory.

The Bibliography gives a list of the works to which reference has been made in the course of this research. A sample lexicon as well as a chapter which argues that Igbo complementizers and function words must be verb-forms are contained in the Appendix.

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PART 1

CHAPTER 1 INTRODUCTION

1.1. This work and its contribution to the study of
Language

This work is completely original and its aim is two-fold:

- (a) To contribute to the literature on the Igbo language and thus increase our knowledge of this Tone Language in particular, and possibly, of typologically similar languages in general;
- (b) From an accurate description of this dialect to try to provide some answers, albeit tentative, to some of the issues raised by transformational generative theory.

With regard to the first aim, this work represents the first systematic description of the process of complex sentence formation in Igbo. Our emphasis has been on an accurate description of a wide range of data so that any hypothesis we have made might not be very easily falsified.

In the first part of this thesis, we have demonstrated that:

- (a) There are inflectional affixes in Igbo and that these are obligatory. in verb inflectional morphology, rather than optional, as has been suggested by Green and Igwe (1963).
- (b) A description of Igbo construction types along the Affirmative and Negative divisions is much more revealing and of general relevance to other dialects of the language than the Green and Igwe analysis of Subject Verb Forms I and II based on the presence and absence respectively of the open vowel prefix.

- (c) Igbo is very much a "Verb" language, and what are semantically empty function words in other languages are verb forms in the language.

All these findings, together with new facts about Igbo phonology such as Tone assimilation, Regressive and Coalescent phonemic assimilation along with new dimensions of vowel harmony, will lead to a more accurate description and a better understanding of Igbo.

In pursuit of its second aim - its possible contribution to linguistic theory, the research has provided some tentative answers to some of the current issues in the theory of generative, transformational grammar.

Following Rosenbaum (1967) and Robin Lakoff (1968), the transformational treatment of sentential complementation has assumed that complementisers are semantically empty morphemes which have no place in the base, but are introduced into the appropriate derived structures by means of a transformation; hence the transformational hypothesis of complementiser insertion. In reaction against the above theoretical assumption, it has been argued, notably by Bresnan (1970) and Paul and Carol Kiparsky (1971) that complementisers are far from the semantically empty morphemes that they have been taken to be. They point out that complementiser selection must be sensitive to the semantic interpretation of the embedded NP complement, and therefore argue for a deep structure specification of complementisers. This is the Phrase structure hypothesis. Our investigation shows that for a tone language such as Igbo, it is necessary to introduce complementisers by means of base rules.

Secondly, we have shown that certain Igbo conjunctions, complementisers and prepositions are associated with existing verbs of the language.

Thirdly, the research reveals that only one category of NP complements - the subjunctive Ka/Ma complements - are subject to the rule of EQUI - NP deletion followed by Infinitivization. In view of the fact that verbs which are subject to this rule in different languages - English, Japanese, Igbo, Akan - share similar, if not identical semantic features, the hypothesis becomes irresistible, namely, that those rules of language which are truly universal (and EQUI may be one such rule) are likely to be those which are semantically determined.

Finally, we have shown that there is no motivation for any distinction between NP and VP complementation in Igbo.

1.2.0 Igbo in the Context of Nigerian Languages

Igbo is one of the three major languages of Nigeria, the others being Hausa, and Yoruba. It is the major language of Eastern Nigeria, spoken by all the people who inhabit what is now the East Central State (7.5 million people according to the 1963 Census figures ¹), and by the West Niger Igbos in the Midwest State. It is also the first language of Diobu - Port Harcourt and Ikwerre Eke, whose peoples are racially Igbos, and of the Opobo people (as a second language), all in what is now known as the Rivers State of Nigeria.

Igbo has been classified as a member of the Kwa group of languages by Westerman (1952) and Greenberg (1960).

¹ We have avoided using the 1973 Census figures because they are subject of serious controversy in Nigeria, and are not to be quoted until they have been validated.

Greenberg's classification is the more recent of the two and describes the Kwa group as one of the subgroups of the larger family of languages to which he gives the name NIGER-CONGO. The Kwa subgroup of languages covers most of the coastal areas from Liberia down to and including Southern Nigeria; the Kwa languages are mainly non-class, tone languages.

1.3 Igbo - A Tone Language

Igbo is a tone language; the function of tone in the tone languages of the world is so increasingly becoming the subject of research that familiarity with the term is taken for granted here. Moreover, the subject of this thesis is the syntax of an aspect of a tone language, and since tone is central to the syntax of tone language, the functioning of tone will become increasingly clear as the thesis progresses. Briefly, then, a tone language is one that makes use of lexically and syntactically significant pitch contrasts. As an illustration of lexically significant pitch contrasts, the now familiar quartet will be sufficient:

1 (a)	ákwa`	(high-low)	cloth
(b)	àkwá'	(low-high)	egg
(c)	ákwa	(high-high)	cry
(d)	àkwa	(low-low)	bed
(e)	Ónū̄	(high-downstep)	- a proper name.

These minimal pairs are distinguished by their contrasting tone patterns.

The interplay of tone and word order is the essence of the syntax of the Igbo language, of which Noun Phrase Sentential Complementation is an integral part.

In view of the fact that the grammatical significance of tone will become evident in this thesis, a few examples will suffice to illustrate the point here:

2 (a) 0' rīri ya amusu (Declarative)

He ate him/her witchcraft:

He practised witchcraft on him/her.

(b) 0 rīri ya amusu? (Question)

Did he practise witchcraft on him/her?

In these two examples, the change from a declarative to an interrogative sentence has been signalled by the contrasting tone of the pronoun subject, 0, which is high in 2(a) but low in 2(b).

2 (c) 0' gā ejhé ahyā eci

He will go to market tomorrow.

(d) 0' gā ejhé ahyā ecī.

He will go market of tomorrow:

He will go to tomorrow's market.

Observe here that the change of grammatical function is indicated by the tone patterns: in 2(c) eci is just an adverbial adjunct, but in 2(d) the same item is in constituency with ahyā in the nominal phrase, ahyā ecī, a fact which accounts for its final downstep.

1.3.1. Abstract Syntax and Tone

The number of distinctive tones which a language has in deep structure does not depend on the number of pitch contrasts that the language employs.

In Igbo, for example, we have a three - level pitch contrast, high (✓) contrasting with a low (✓), and downstep high (-) which contrasts with its absence². But only the high and low pitches need be specified in deep structure; the third - the downstep or lowered high, is a surface or phonetic manifestation of various grammatical relationships, and therefore has no place in deep structure in this dialect under investigation. Unlike the mid tone in Yoruba, the occurrence of which does not depend on a preceding high tone, the Igbo downstep is always a relation between two high tones.

To say this much is not to imply that downstep is the only surface manifestation of underlying grammatical relationships in Igbo. A high or low tone is as much a marker of grammatical relationships as a downstep, but with this difference that early grammars of the language drew the attention of scholars to the presence of this tonal phenomenon because it is much more common in Igbo than, say, a low tone which derives from an underlying high tone or vice versa.

² Professor Kay Williamson points out in her Igbo-English Dictionary, Ethiope Publishing Corporation, Benin City, Nigeria, 1972, that the Onitsha dialect of Igbo has minimal pairs such as

álu	bite
álū	abomination
áma	space
ámā	a mark

This contrast does not exist in the dialect being described here, except in Prepositional Phrases as in -

n'ónū	- in the mouth
n'imē	- inside

(cf 3.4. p.139).

For example, Mr. Winston³ has likened the Igbo downstep to the English morpheme {-S} which has the following syntactic functions:

- (a) It is the Plural marker of count nouns;
- (b) " " " Singular " " verbs;
- (c) " " " Possessive " " nouns and pronouns;
- (d) It also indicates the unstressed Auxiliaries such as has and is as in "It's time".

The comparison is very appropriate.

But one should not forget that there are some surface or phonetic high pitches which derive from underlying low ones, in the same way as there are phonetic or surface low pitches which are high in deep or phonological representation. For example, Igbo is full of nominal structures such as those of 3 where surface high and low pitches originate from deep low and high ones respectively.

3 (a) àla ≠ íbè → àlá Ìbè: Ibe's piece of land.
 ódhù ≠ mgbadha → ódhū mgbadha: an antelope's tail.

Tone changes such as the above and their generation in the phonological component of the grammar by means of tone rules, form the subject of chapter 3.

In the same way, the rising glide that nouns of tone classes 3 and 4 (see 3.6.0) develop in relative clauses must also be seen as a surface or phonetic phenomenon:

4 (a) Àla kugburu mād̀hù → Àlá kūgburu mādhū
 The god, Ala, killed somebody The god, Ala, that killed somebody.

³ Mr. F.D.D. Winston, Department of Africa, S.O.A.S. in an informal discussion.

4 (b) Ógù zara ezhí ⇒ Ógù̃ zāra ēzhi

Ogu swept the compound Ogu who swept the compound

All these tone changes reflected by examples 3 and 4 are exponents of an underlying syntactic relationship as much as a downstep is. What these examples reveal is that whereas downstep remains a surface marker of underlying syntactic relationships, high (that is, non - downstep high) and low tones are basically deep structure tones which may also mark some grammatical relationships as in 3(a) above.

The foregoing examples suggests the need for Deep or Abstract syntax in the analysis of tone languages. As we shall show in Chapter 3, it enables one to account for the above tone changes in a systematic way, and to capture essential relationship between items in structure, where this exists.

1.4.0 The Dialect under Investigation

The dialect being described here is one of the dialects of Ezinihitte in Mbaise Division. It is one of the central Igbo dialects and has a lot in common with Òhùhù, the dialect of Green and Igwe, but much more with the dialect described by Swift, Ahaghotu and Ugorji (1962). Like other dialects of Igbo, this dialect has a terrace-level tone system. The phonological and morpho-syntactic characteristics of the dialect form the subject of the following chapter 2.

1.5 Conventions Employed in The Thesis

Orthography The orthography used throughout this dissertation is the Official Igbo Orthography approved and adopted by the East Regional government of Nigeria in 1961 and used by Green and Igwe in their Descriptive Grammar of Igbo (1963).

Tone-marking Convention

Our system of tone marking differs from the now conventional system employed by Green and Igwe in which high tones are left unmarked. In our tone notation, only the first of a sequence of level tones on the same pitch is marked, the rest being left unmarked until a contrasting pitch is reached. Very rarely has a sequence of two highs or lows on the same pitch been marked, except for the purposes of contrast or in order to draw attention to a particular syllable. Thus, a fully tone-marked sentence such as 5(a) is marked throughout this thesis as in 5(b).

- 5 (a) Ácòrò m̃ ímā mǎ ò gǎ àbyá' →
 (b) Ácòrò m̃ ímā mǎ ò gǎ abyá'

Want I to know if he will come : I want to whether (or not) he will come. Contrast the above pair with the following 6(a) and (b) where the contrasting tones of pronoun subject in Declarative and Interrogative complements are being highlighted:

- 6 (a) Écè m̃ na ò gǎra Owere
 (b) _____ mǎ ò _____
 I think that he went to Owere
 I wonder whether he " " "

If attention were not being drawn to the contrasting tones of the pronoun subject of the complements clauses in 6(a) and (b), 6(b) would be marked as in 6(c)

- (c) Écè m̃ ma ò gǎra Owere

Translation into English

As a general policy, we have adopted the method of giving the literal translation of our Igbo examples first, and the idiomatic English equivalent afterwards.

This has been done to facilitate the reader's understanding of the sentences and their internal structure, and thus enable him to follow any arguments based on such an understanding. This general principle is, however, relaxed in certain cases; for example, if in a paradigm the literal translation of the first member has been given followed by its idiomatic equivalent, then only the idiomatic rendering of subsequent members is given, since the literal rendering of the entire paradigm is assumed to have been provided by the translation of the first member. In other cases, a sentence may be straightforward and there is nothing gained in giving a literal translation first; in such cases only the idiomatic rendering has been considered necessary.

Braces { } serve two functions. They may be used to collapse two or more rules sharing part of their structural description (SD). Thus, an expression of the form

$$X \left\{ \begin{array}{c} Y \\ Z \end{array} \right\} W$$

is an abbreviation of the following two strings

(a) X Y W

(b) X Z W

in that order (in the case of ordered rules).

In giving examples, braces are also used to indicate sets of synonymous expressions as in 7

$$\begin{array}{ll} 7 & (a) \quad \begin{array}{c} \text{ó} \\ \cdot \end{array} \left\{ \begin{array}{c} \text{ghùgha} \\ \text{nà aghù} \end{array} \right\} \text{ahù} \\ & (b) \quad \begin{array}{c} \text{ó} \\ \cdot \end{array} \left\{ \begin{array}{c} \text{ghùgha} \\ \text{nà aghù} \end{array} \right\} \text{āhù} \end{array}$$

Parenthesis (Circular Brackets) also serve two functions.

They may be used to indicate optional items in structural descriptions; thus

X (Y) Z

is an abbreviation of the two strings

X Y Z

X Z

in that order.

They may also be used to indicate optional items in examples, that is, items which may be omitted without any loss or change in meaning.

Square Brackets [] have been used here to show phonetic representations and also to separate constituents of a phrase marker in which case they are usually labelled, as in

NP [N [Verb NP Rel. Cl.]] VP
Rel. Cl. NP

They are also used to enclose (phonological) features as in

[+S] for a high tone,

and

[+S] for a low tone.
[-R]

The Asterisk * indicates sentences characterised by the grammar as deviant or ill-formed.

The Solid Arrow → has been used in Phrase Structure rules to mean 're-write as' as in S → NP VP

The Double Arrow ⇒ means "is transformed into" and is used with respect to transformational rules.

1.6 Igbo Language Studies - An Overview

As far as we know, the present study represents the first systematic account of the process of formation of any Igbo complex sentence type either within the Traditional Descriptive or Modern Transformational model. This is not to say that the Igbo language has not been described before in any detail. Far from that, there is a handful of Igbo grammars, some of which are briefly discussed below.

Among these, the first attempt to construct a grammar of Igbo in the larger frame is Ida Ward's *AN INTRODUCTION TO THE IBO LANGUAGE*, (1936). Ward's grammar is mainly a pioneer work with a modest aim "to set out the results of research into the tones and tonal behaviour of Ibo, and to present these results in such a way as to introduce the learner to the difficulties of the language gradually, as far as this is possible. It may be considered as a kind of handbook covering the initial stages of grammar and tones" (Introduction P. IX). Despite this modest aim, Ida Ward does go beyond simple sentences and tones to more complex sentences with subordinate (embedded) clauses. Chapter XXIV of this book on Subordinate Clauses devotes a section to Noun Clauses (the traditional label for Noun phrase sentential complements), although only the Nà noun clauses are briefly treated by way of a few illustrative examples. A separate chapter IX is devoted to infinitives; although she gives representative Igbo sentences with infinitival complements, she does not link these infinitives with any other non-infinitive clauses in the language.

This observation must not be construed as a criticism of Ward or, indeed, any other scholar of the Igbo language because the insight into the necessary relationship between surface and deep structures has only been recently made possible by transformational generative theory.

The next description of Igbo worth discussing is the Swift, Ahaghotu and Ugorji IGBO BASIC COURSE (1962). This is a purely pedagogic grammar aimed at foreigners, and is, therefore, primarily concerned with the identification of tone contrasts by means of tone drill exercises. It is, however, the only Igbo Grammar of those mentioned here that identifies si' as a conjunction (that is, the complementiser), and associates it with the verb isi' 'to say' thus: "this form of the verb isi' is used following verbs referring to what a person suggested, desired, agreed, intended and the like to introduce a clause of reporting (indirectly) the intention or suggestion." This is the first indication of the manifold function of si' in the Ezinihitte dialect of Igbo. Swift et al. also mention the substitutability of ka for si' in their discussion of Ka clauses which they describe as Hortatives. They argue thus: "Hortative means 'mandatory' or 'advisory', and this form following Ka (that) is a stronger order than after si where it is a suggestion" (P 314).

The reliability of this semantic distinction based on *si* and *kà* is, however, questionable. The fact is that *si* can be used in place of any of the conjunctions (complementisers) which we show in chapter 4 to be functional in Igbo NP complementation. But the substitution of *si* for any of the other conjunctions carries with it some stylistic implications as the following

8 (a) - (c) show:

- 8 (a) *Anyi* *coro* *si* *kà* *Ogu* *méchee* (very formal)
 (b) " " *ka* " " (formal)
 (c) " " *si* " " (colloquial)

We want that Ogu finish:

We want Ogu to finish (what he is doing) Thus, the above sentences vary from the very formal to the colloquial, and the question of one being a stronger order than the other does not arise since *kà* does not introduce the imperative in Igbo, a point which we take up in chapter 8.

In their discussion of Reported Speech (*Nà* complementation) Swift et al rightly observe that Subject pronoun singular may differ in form from reported speech to direct address. They thus give the form of subject pronouns in Reported Speech as follows:

- 9 (a) *Am* I
 (b) *Agi* You
 (c) *Aya* He/she

The observation is correct, and Green and Igwe (1963) describe such forms as those of 9 as the Emphatic form. But what they fail to point out is that such forms occur much more frequently after the conjunction *si* than after any of the others.

By far the most comprehensive and detailed grammatical description of Igbo in existence is the Green and Igwe, A DESCRIPTIVE GRAMMAR OF IGBO (1963); yet it is almost silent on Noun Clauses, a topic which it dismisses in a couple of illustrative sentences under the general heading of clauses. Their chapter on Conjunctions does not seem to be based on any discernible system. As far as one can judge, the value of this chapter on conjunctions lies, not so much in the insight it gives about the functioning of Igbo conjunctions, as in its numerous and varied examples. Undoubtedly, this book is a copious description of Igbo with a lot of detailed discussion and illustration of the Subject Verb Forms and Relative clauses. There is little doubt, however, that some aspects of Igbo grammar have had to suffer as a result of the detailed attention given elsewhere.

Within the transformational model of grammatical description, Mrs. Patricia Carrell's A TRANSFORMATIONAL GRAMMAR OF IGBO (1970) represents the first application of the transformational generative theory developed by Chomsky to the description of the Igbo language. Like all the previous works so far discussed, it is a grammar in the larger frame and, consequently, does not treat any aspect of Igbo syntax in any detail. Nevertheless, this transformational analysis of Igbo deserves some detailed comment here because of the differences between it and the one presented in Part II of this thesis.

Our analysis differs in some fundamental respects from that of Mrs. Carrell. To begin with, all our complementisers are generated by rules of the base, and we have advanced reasons to justify this method in chapter 4 (4.3.).

We have also defended the specification of the abstract head proform ya' to all NP complements in Igbo. All this is in contrast with Mrs. Carrell's analysis: she neither has the abstract proform ya' in base structure, nor does she generate her complementisers by base rules. On the contrary, she introduces complementisers by a simple substitution transformation, much in the tradition of Rosenbaum (1967), which changes the phrase boundary symbol # into the conjunction Na' or Ka'. She says nothing about embedded questions. Her silence on this aspect of NP complementation is understandable from the fact that the dissertation from which her book originated was submitted at the University of Texas at Austin in 1967, only a matter of two years after Chomsky's ASPECTS. Until Bresnan (1970) pointed out that embedded questions are also instances of NP complements, transformational generative grammarians had not come to recognise this fact.

In matters of detail, our analysis differs from Carrell's. For example, we have not found any syntactic justification for deriving the surface $K\hat{a}$ complements from a structure such as the following via a Reduction transformation:

X ₁ ,	NP,	(AUX)	V,	NP	Ka	NP	X ₂
1	2	3	4	5	6	7	8
Sc	:	5	7	null	(i.e.	delete 5)	
Condition	:	optional					
M' na	acq	anwu	ka	anwu	mwq	thaa	⇒
I want		the sun	that	the sun	shines	today	
M' na	acq	ka	anwu	mwq	thaa		
I want		that	the sun	shines	today:		
I want the sun to shine.							

ǎ́a' ná a'c'q' g'í kà g'í rié jí ⇒
 They want you that you eat yam

ǎ́a' ná a'c'q' kà g'í rié jí
 They want that you eat yam:

They want you to eat some yam.

To the above analysis she adds: "Kà clauses with the NP object of the main clause as the subject are said to be 'wordy' and redundant, though not ungrammatical, by native speakers. Hence, the reduction described in this rule, though optional, usually occurs" (P.52). This reduction rule is made necessary only by Carrell's analysis. A detailed examination of Igbo NP complementation such as we have presented in this thesis reveals that the above analysis of Kà clauses has little or no support from the facts of Igbo syntax. There are other issues that one could take up with Carrell's analysis of Igbo, but these belong, not to this thesis, but to a review of her TRANSFORMATIONAL GRAMMAR OF IGBO.

Chapter 2 The Phonological and Grammatical Features of the Dialect

2.0.0 Introduction

This chapter has been made necessary by a number of considerations. First, although this dialect being described here shares a lot of similarities with Ohuhu dialect described by Green and Igwe (1963), it has its own unique features which have never been described before. These features, some phonological, some grammatical, must be pointed out and high-lighted here and elsewhere in this study so that their subsequent occurrence might not startle the reader.

Secondly, in morpho-syntax, there is a fundamental difference between this and the dialect of Green and Igwe, a difference which has only been pointed out in interpersonal discussions, but never put in print before. The difference is this: The role of Affixes (prefixes and suffixes) in the inflectional morphology of Igbo has been very narrowly understood, or at best, has been seen only from the viewpoint of the Green and Igwe Grammar of 1963. Although in a recent thesis accepted by the University of London for the degree of Doctor of Philosophy in December 1973, Rev. Igwe presents a very detailed and informative analysis of the role of Affixation in Igbo grammar, the basic view expressed as far back as 1963 that suffixes are optional elements (the underlining is mine) in verb inflection is repeated in this thesis with greater emphasis. Since our own analysis based on facts from a different dialect suggest a radically different approach, this difference ought to be pointed out with equal emphasis, if only to make the reader aware of a different set of facts and different viewpoint\$, especially as we are convinced that our view is more representative of more dialects of Igbo than the analysis of Green and Igwe.

These views are expressed in sections 2.3 & 2.3.1 of this chapter.

Thirdly, the distribution of affixes according to construction types differs in the two dialects being discussed here. This difference in distribution makes it necessary for us to modify, to a great extent, the Green and Igwe distinction into Subject Verb Forms I & II based on the presence in Form II and its absence in Form I of the harmonising open vowel prefix here symbolised as A-. In our dialect, the distinction holds only in Affirmative constructions; in Negative constructions, on the other hand, the need for such a distinction ceases to exist, since every Negative verb form in this dialect has an obligatory, harmonising prefix A-, except when the subject of such a verb is the monosyllabic, inseparable singular pronoun such as

I/I	You	
		(singular)
0/0	He/she/it	

For our dialect and others like it, it is more appropriate to talk of the Negative and Affirmative Conjugations of the Verb, making use of obligatory inflectional prefixes and suffixes, rather than of Subject Verb Forms I and II.

This chapter is divided into two parts: the first part deals with the phonological features, while the second is devoted to the grammatical characteristics - that is - the morpho-syntax and the polysystemic tone patterns associated with different construction types in Igbo.

2.1 Phonology

Under phonology, we shall discuss the following:

- (i) Consonants and Vowels.
- (ii) Vowel Harmony and
- (iii) Assimilation

Consonants and Vowels:

Consonants

The consonant system of this dialect is like that of the general Central Igbo dialects; but it differs from some of them in possessing an ingressive /t/ which may be symbolised as /d̥/ as in

ádù chewingstick

ùdā' bow

This means that our /d̥/ varies with /t/ in other dialects as the following examples show:

-tA suffix in other dialects -d̥A in ours

íṫùtā (to come out) íṫùdā

ítútù to pick íd̥ùd̥ù

ízùtā buy ízùdā

ùtù weevil ùdù'

átù chewing stick ádù

ùtútù morning ùd̥ùd̥ù

Although this sound correspondence exists between this dialect and others, it is not always consistent, since the dialect abounds in lexical items with /t/ where one would expect the ingressive /d̥/. For example, one finds among the verbs, the following items with the /t/ phoneme where one might be led to expect the ingressive /d̥/:

ítō to grow but not *ídō̃

ítē " rub, dance, climb " *ídẽ

This correspondence is therefore not predictable, because not consistent.

As in most dialects of the Central Igbo area, aspiration, nasalisation, palatalisation and labialisation are distinctive in our dialect. A few minimal pairs are given below to illustrate these phonological features and the system of writing them in this thesis:

(a) Aspiration

àkhụ	wealth
àkụ	termite
ìkhū	to plant
ìkū	to beat
ìthē	to wake
ìtē	to plaster, polish, smoothen.
ìg'ụ	to tie (as of load), bind.
ìgụ (aḥwa)	to name (a child)

Throughout this thesis, the symbol g' is used to represent the aspirated, voiced velar stop. This has been done to avoid a possible confusion with the voiced velar fricative gh [ɣ] as in əgha [a ɣ a] war.

(b) Labialisation

áḥụ	[a'ḥ ʋ]	bees
ánwụ	[a'ḥw ʋ]	sun

(c) Nasalisation

ìsū	to pound (yam into fufu)
ìṣū	to clear a bush for planting
ìvū (éde)	to harvest (cocoyams)
ìṽū	to hatch (eggs/chickens)
ìṽū ǫnụ	to bless, wish well

(d) Palatalisation

íbā		to grow/become rich, increase
íbyā		to come
ípā		to carry
ípyā	(hwe)	to flog, thrash
ípyā	okhalaka	to grow tall
írá	(íre)	to show the tongue in swearing to swear in earnest
íryā	(oryā)	to fall sick, be sick

The implication of the phonemic status of these phonological features in the Central dialects of Igbo is that such dialects have many more consonant phonemes than the present Igbo orthography reveals. Professor Armstrong (1967) summarises the situation as follows: " in Igbo, as in the other Kwa languages, there are in general no consonant clusters. On the other hand, there are many compound consonants, with quite complex articulations. We see that the Onitsha dialect has less than half as many consonants as any of the three Eastern dialects. The figures are: Olu 64 consonants, Owerri 60 consonants, (Ezinihitte in Mbaise is grouped under Owerri), Onitsha, 28 consonants " The problem of Igbo orthography is outside the scope of the present study, and does not receive any more mention here.

Vowels

Like most Igbo dialects, our dialect has 8 vowels which strictly observe vowel harmony. These are:

	FRONT	BACK
1	i	u
2	ĩ	ũ

	FRONT	BACK
3	e	o
4	a	ɔ

The two distinct harmonising sets are:

	SET 1		SET 2
1	i	2	ɪ
3	e	4	a
5	u	6	ʊ
7	o	8	ɔ

The vowels in each set harmonise with one another, and where this harmony is broken, it is an indication that there are two distinct roots involved in a compound word, for example in Igbo compound verbs:

íḡáfu	-	íḡā	+	ífù
to get lost travelling		to go		to be lost

From a purely impressionistic account, we believe that the phoneme /e/ has two allophones in this dialect, as exemplified from the sound of the same orthographic /e/ in the following pair of words:

éḡbe	kite
éke	python

the tongue height in eke seems lower than in the articulation of the [e] in egbe - 'gun'. This needs to be investigated. The relative position of the above vowels on the Cardinal Vowel Chart is given by Dunstan (1969).

2.1.1 Vowel Harmony

Vowel harmony has long been recognised in Igbo; it has been given prosodic treatment by Professor Carnochan (1960) in his article "Vowel Harmony in Igbo." Being features of entire syllables, vowel harmony along with such other phonological features as nasalisation seem best captured in a prosodic treatment which is economical and descriptively adequate at the same time.

Vowel harmony is very rarely, if ever, broken in this dialect even where formatives (prefixes and suffixes) are involved. For example, the following 1(a) is possible in some dialects of Igbo, but only 1(b) in which the -tA suffix harmonises with the vowel of the preceding verb stem is used and heard in the dialect being described here.

- | | | | | |
|---|-----|--------|----|-----|
| 1 | (a) | Wetára | m̄ | ncà |
| | (b) | Wetere | m̄ | ncà |

Bring for me soap: Bring me soap.

It is true to say that in this dialect all inflectional and derivational affixes either harmonise with or assimilate to the preceding vowel, be it in the verb stem or in another suffix. The only exception so far discovered is the perfect suffix, negative, -bèle which maintains its phonetic and tonemic identity in all contexts.

Similarly, the phonetic form of the following prefix and pronouns is also governed by vowel harmony:

- (a) The second, third, person, singular as well as the impersonal pronoun subject;
- (b) The infinitive, high front vowel prefix.

This is why the following symbolisation has been used throughout this thesis as the underlying form of the foregoing items:

- (i) A (With two phonetic realisations based on vowel harmony a/e) for the open vowel inflectional prefix, as well as for the indefinite pronoun.
- (ii) O (With two phonetic realisations, o/o) for the open vowel inflectional suffix and for the third person, singular pronoun subject. In the case of the third person singular pronoun subject, O is a morphophonemic variant of a deeper form ya which is discussed extensively in chapter 5.
- (iii) I (With two phonetic realisations i/i , represents the infinitive prefix, as well as the morphophonemic form of the second person pronoun gí.

The use of the above symbols is illustrated in the following examples:

- 2 (a) Ógù AriÁlA hwe' → Ógù eriele hwe
Ogu has eaten (something).
- (b) Ógù AgáAlA áhya → Ógù agáala ahyā
Ogu has been to the market.

With Imperative Sentences

- 3 (a) Únú fúó → Únú fúó
You people, go out
- (b) Únú ríÁ → Únú ríe : Eat, you people
- (c) Únú nýó → Únú nýo : Drink " "
- (d) Únú gbúó → Únú gbúo : Kill, " "
- (e) Únú dhaÁ → Únú dhaá : Fall down " "
- 4 O' { garV } áhya → O' gára áhya
{ jherV }
O' jhere "
He went to market.

- 5 (a) \dot{I} $\tilde{h}w\dot{u}rV$ $y\acute{a}$ \longrightarrow \dot{I} $\tilde{h}w\dot{u}r\dot{u}$ $y\acute{a}?$
 Did you see him?
- (b) \dot{I} $l\dot{o}rV$ $y\acute{a}$ \longrightarrow \dot{I} $l\dot{o}r\dot{o}$ $y\acute{a}?$
 Did you swallow it?
- 6 (a) \acute{I} + $m\acute{e}$ Verb \longrightarrow $\acute{i}m\bar{e}$ 'to do'
- (b) \acute{I} + $l\acute{u}$ Verb \longrightarrow $\acute{i}l\bar{u}$ 'to marry'
- (c) \acute{I} + $b\grave{i}$ Verb \longrightarrow $\acute{i}b\grave{i}$ 'to live'

For suffixes such as $-rV$ which assimilates completely to the preceding syllable in tone and vowel, and the preposition $n\grave{a}$ which assimilates to the tone and vowel of the following syllable, we propose the following morpheme-structure (MS-) rules:

MS- Rule 1

$$\left[\begin{array}{c} CV_1 \\ \alpha \end{array} \right]_{V\text{-stem}} + \left[\begin{array}{c} rV \end{array} \right] \longrightarrow \left[\begin{array}{c} CV_1 rV_1 \\ \alpha \end{array} \right]$$

where α denotes the tone of the verb stem.

M.S. Rule 2(a)

$$\left[\begin{array}{c} \text{Prep.} \\ n\grave{a} \end{array} \right] \longrightarrow \left[\begin{array}{c} \text{Prep.} \\ nV_1 \\ \alpha \end{array} \right] / - \neq \left[\begin{array}{c} \text{Nominal} \\ V_1 \\ \alpha \end{array} \right] \left[\begin{array}{c} CV_2 \end{array} \right] \neq$$

where V_1 is a vowel, and α denotes the initial tone of a two-syllable nominal.

M.S. Rule 2(b)

$$\left[\begin{array}{c} \text{Prep.} \\ n\grave{a} \end{array} \right] \longrightarrow \left[\begin{array}{c} \text{Prep.} \\ na \\ \alpha \end{array} \right] / - \neq \left[\begin{array}{c} \text{Nominal} \\ N \\ \alpha \end{array} \right] \left[\begin{array}{c} CV \end{array} \right] \neq$$

where N is a syllabic nasal, and α denotes initial tone.

What these two rules amount to is that the preposition Na assimilates¹:

- (a) To the initial vowel and tone of the immediately following syllable of a nominal in a prepositional phrase (M.S. Rule 2a) thus:

- 7 (a) $na^{\grave{}} \neq \acute{a}ma \rightarrow na^{\acute{}} ama$ on the street
 (b) $na^{\grave{}} \neq \acute{u}l\grave{o} \rightarrow \left\{ \begin{array}{l} na^{\acute{}} \acute{u}l\grave{o} \\ n\acute{u} \acute{u}l\grave{o} \end{array} \right\}$ in the house

- (b) To the tone only of the immediately following syllable of a nominal in a prepositional phrase, if this syllable begins with a syllabic nasal (M.S. Rule 2b) thus:

- 8 (a) $na^{\grave{}} \neq \acute{m}kp\grave{a} \rightarrow na^{\acute{}} m\acute{k}p\grave{a}$ in/from necessity
 (b) $na^{\grave{}} \neq \grave{N}gwur\acute{u} \rightarrow na^{\grave{}} Ngwur\acute{u}$ at Ngwuru
 (c) $na^{\grave{}} \neq \acute{n}dh\grave{u} \rightarrow na^{\acute{}} ndh\grave{u}$ in life

- (c) Elsewhere, na does not assimilate as to vowel or tone as in,

- 9 (a) $na^{\grave{}} \neq L\acute{a}gwa \rightarrow na^{\grave{}} L\acute{a}gwa$ at Lagwa
 (b) $na^{\grave{}} \neq L\acute{o}ndon \rightarrow na^{\grave{}} L\acute{o}ndon$ in London
 (c) $na^{\grave{}} \neq L\acute{o}j\grave{i} \rightarrow na^{\grave{}} L\acute{o}j\grave{i}$ at Loji

1 Perhaps, assimilation is not the right term to use in the description of the behaviour of the Na preposition. What is certain is that the first syllable of the nominal that immediately follows Na is lengthened, if it begins with a vowel. The exact length of this syllable can only be determined by means of a mingograph tracing. The issue is taken up again in 2.2.2 where evidence is provided to show that the duration of the Prepositional Phrase Na + N with tone and vowel assimilation is by and large the same as that of the two items unassimilated.

Carnochan (1960) has given a prosodic treatment of Vowel Harmony in Igbo, but in the dialect being described here, the operation of Vowel Harmony is slightly different, as the following diactic structures show:

10	(a)	Íshi	è/ éhĩ	this/that head
	(b)	Íři	è/ éhĩ	this/that food
	(c)	(i) nthĩ	à	this ear
		(ii) nthĩ	éhĩ	that ear
	(d)	(i) éle	è	this antelope
		(ii) éle	éhĩ	that antelope
	(e)	(i) íjhē	è	this journey
		(ii) íjhē	éhĩ	that journey
	(f)	(i) alá	à	this land
		(ii) alá	éhĩ	that land
	(g)	(i) áma	à	this road
		(ii) áma	éhĩ	that road
	(h)	(i) úgwu	ò	this hill
		(ii) úgwu	ohĩ	that hill
	(i)	(i) úgwu	ò	this (type of) hatred
		(ii) úgwu	ohĩ	that " " hatred
	(j)	(i) ířo	ò	this (type of) hatred
		(ii) ířo	ohĩ	that " " hatred
	(k)	(i) úlō	ò	this house
		(ii) úlō	ohĩ	that house

In this dialect, the diactic element has eight phonetic realisations, whereas in the dialect described by Carnochan, it has only four.

The Diectic structure being discussed here can be further expanded by the addition of *nke* thus:

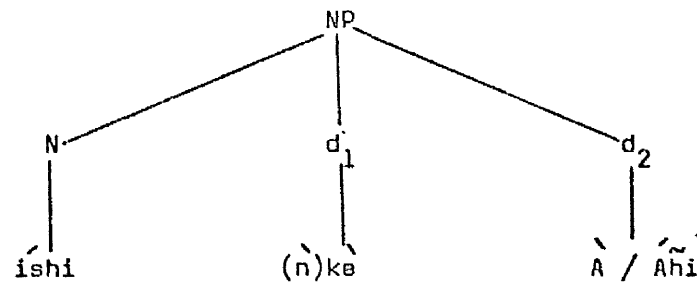


FIG 1

The above figure 1 is the underlying form for the following nominal phrases:

- | | | | | | |
|----|-----|----------|------|------|------------------------|
| 12 | (a) | íshi | kē | è | this head |
| | (b) | íshi | kè | áhí | that head |
| | (c) | órú | kē | è | this farm/work |
| | (d) | órú | kè | áhí | that farm/work |
| | (e) | íwāanya | kē | è | ná ākú ahyā : |
| | | open-eye | this | that | causes loss of market: |

This self-defeating boldness/audacity

As can be seen from 12(a) (e), the number of phonetic realisations after *nke* has been greatly restricted by the preceding vowel /e/ of the diectic element.

Thus, in place of the eight possibilities given in (10), there is only one in the following examples from Onitsha dialect.

- 13 (a) $\text{mámányá} \neq \text{áfù} \rightarrow \text{mámányá afù}$
that wine
- (b) $\text{nni} \quad \text{áfù} \rightarrow \text{nni afù}$
that food
- (c) $\text{égò} \quad \text{áfù} \rightarrow \text{égo afù}$
that money
- (d) $\text{úgwu} \quad \text{áfù} \rightarrow \text{úgwu afù}$
that hill
- (e) $\text{ámàkèkwu} \quad \text{áfù} \rightarrow \text{ámàkèkwu afù}$
that incorrigible fellow
- 14 (a) $\text{únò} \neq \text{à} \rightarrow \text{únò à}$ this house
- (b) $\text{ùfù} \quad \text{à} \rightarrow \text{ùfù à}$ this pain
- (c) $\text{íjè} \quad \text{à} \rightarrow \text{íjè à}$ this journey

What is true of Onitsha dialects is equally true of other Central Igbo dialects which have à/áhù , that is an $/h/$ in place of Onitsha $/f/$. In these dialects, vowel assimilation, but not harmony, obtains in Nominal phrases such as 13. These phonological features being discussed here have not been pointed out before because there has been no study of this dialect before now.

From the deictic structures being considered, another phonological fact also emerges: the low-tone determiner à (this) requires a preceding high tone. This has meant that all underlying low tones preceding it turn out as high tones at the surface or phonetic level, (see 10c(i), e(i), f(i) and k(i), pp. 11-12). This tone-raising is by no means an isolated incident, but part and parcel of a more wide-spread phonological feature with all Nominal structures in Igbo.

This is discussed extensively and illustrated under Nominal Structure Tone Rules in 3.3.0. What must be emphasised here is that this tonal change is structure-specific, its occurrence is restricted to Nominal structures only, under which structures the foregoing examples fall. Outside Nominal structures, this phonologically determined Tone-raising does not occur, as the following examples show:

- | | NP | VP | |
|--------|---|------------------------------|--|
| 15 (a) | ̀Ng'uma | meruru ala | |
| | Nguma | defiled the land. | |
| (b) | Imēbi | akhy na ewe onye mkpata iwe. | |
| | To spoil wealth does anger the one who earns anger: | | |
| | The squandering of wealth does anger the one who earns that wealth. | | |

Each of 15(a) and (b) consists of a Nominal phrase (NP) and a Verb phrase (VP) in the relation of subject and verb in a sentence. Because of the two distinct structures involved, a low tone (sequence) followed by another low tone (sequence) as between ̀Ng'uma and meruru or Imēbi and akhy is not only phonologically possible, but perfectly acceptable. But in an NP structure, such a low tone sequence is blocked by a general phonological rule in Igbo which demands that in any Nominal structure in the language a low tone preceding another low tone across word boundary be raised to a high tone thus:

- | | | | | | | |
|-----|-------|---|--------|---|--------------|-------|
| (c) | Abha | ≠ | Enwe | → | abha' | enwe |
| | jaw | | monkey | | a monkey's | jaw |
| (d) | Ngaji | ≠ | Nkata | → | ngaji' | nkata |
| | spoon | | | | the spoon of | Nkata |

- (e) Ngaji {Nkatá
Nkatà} zùtara mágburu onwe yā.
 spoon Nkata bought beauty-kills self its:
 The spoon which Nkata bought is exceedingly beautiful.

In 15(e) above, we have a Relative Clause as the NP, and the relationship between the modified Noun (Ngaji) and the modifying Relative Clause {Nkatá
Nkatà} zùtara is formally signalled by the final high tone of the subject NP of the clause. In other words, if the NP is of the structure represented by Fig. 2, it is N₁ that has its final low tone raised:

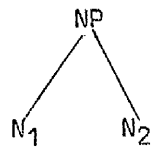


FIG. 2

But with a Relative clause, it is the final low tone of N₂ which undergoes tone-raising, as Fig. 3 shows:

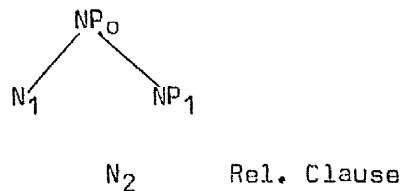
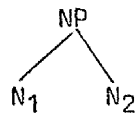


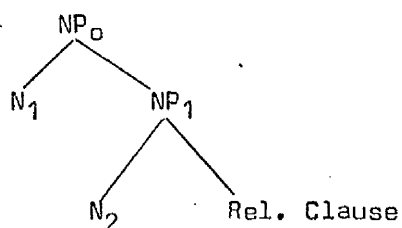
FIG. 3

There is, therefore, a correspondence of tonal behaviour among Nominal structures of the following types:

16 (a)



(b)



(c)

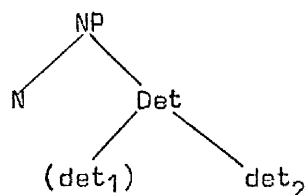


FIG. 4

It is this correspondence of Tonal behaviour that is our justification for generating their tone patterns by one and the same set of Tone rules in chapter 3.

2.2.0 Assimilation

What Dr. Igwe (1974 pp. 32-34) describes as vowel elision is here described as assimilation, and it is generally regressive. Vowel elision, by which we understand a phonologically conditioned deletion or loss of vowel as in the following French examples:

C'est for Cé est or
L'état " Lé état

has very little, if any, place in Igbo phonology. Definitely, it does not occur in the prepositional constructions which Dr. Igwe cites on page 34 of his thesis. The phenomenon of vowel elision is very much restricted in Igbo to a relatively very small number of lexical derivations involving the creation of proper names from Igbo sentences; the process is described in the following section 2.2.1 under the sub-heading 'Lexical Creation, Assimilation and Elision'.

We disagree with Dr. Igwe's view that vowel elision occurs in the language in prepositional phrases, as the following extract from page 34 of his thesis assert: "In all cases the number of syllables is maintained, except in the case of particle + noun where the particle is the preposition na, and the following noun has an initial high-tone syllable. Compare (7) (a) with (b).

- 7 (a) na +ghya : / n ghya / 'in the bush'
 (b) na +òbu : / nòbu / 'in the hall' "

What must be emphasised here is that elision has absolutely nothing to do with pitch. The phenomenon which he calls elision (assimilation, as far as we know) takes place across word/morpheme boundary regardless of the pitch of the items involved. This being the case, it is surprising that prepositional phrases constitute the only exception to what is a general phonological rule of the Igbo language that Nà assimilates to the pitch and vowel of the immediately following syllable, or to its pitch only, if the syllable begins in a syllabic nasal. It seems that Dr. Igwe tends to confuse orthography with phonological facts. Although it is an accepted orthography in Igbo to write:

n' áma	in place of	na' ama
n' ǘlò	" " "	na' ǘlò
n' àhú	" " "	na' ahú
n' àla	" " "	na' ala,

it is no more than a convention to do so, and what is written has nothing to do with the number and duration of the syllables involved, as indeed orthography does not necessarily reflect phonetic facts.

The following mingograms on pages 47-50 represent the result of an experiment to determine the duration of the preposition nà and the noun that follows it in a prepositional phrase. Two types of data have been used.

- (a) The first type of data represent the phonological environment where there can be no vowel assimilation between nà and the following item, such items being monosyllabic nouns beginning with consonants. These are:
- | | |
|-------|------------------|
| Nà dí | in marriage etc. |
| Nà cí | from nature |
| Nà jí | from/with yam |

In the mingograms of these prepositional phrases, (pp. 47-50), Na has a duration ranging from 22-25mm.

Observe that on page 50, the initial low tone of the prepositional phrase Nà Kánò is by far higher in pitch than the final low tone on - nò. This observation is borne out by the fact that the striations of this final low-tone syllable are longer and more spaced out than those of Nà, the initial low tone of the phrase, and thus confirming the hypothesis that pitch tends to drift downward from the beginning to the end of a phrase or sentence, and this downward drifting applies to high as much as to low tones.

(b) These data are such that the phonological environment for vowel assimilation is met since the noun following nà in each case begins with a vowel phoneme. The mingograms are shown on pages 52-54. On each mingogram the first portion represents the prepositional phrase spoken as distinct lexical items, without any assimilation, while the second portion shows nà assimilated to the vowel and pitch of the following syllable, thus:

mà

84 mm.

di

13 mm

mà di

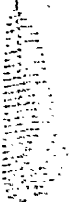
nia

22 mm

cia

30 mm

Nia ci



na
25mm

ji
20mm

na
ji

Ná' Káno

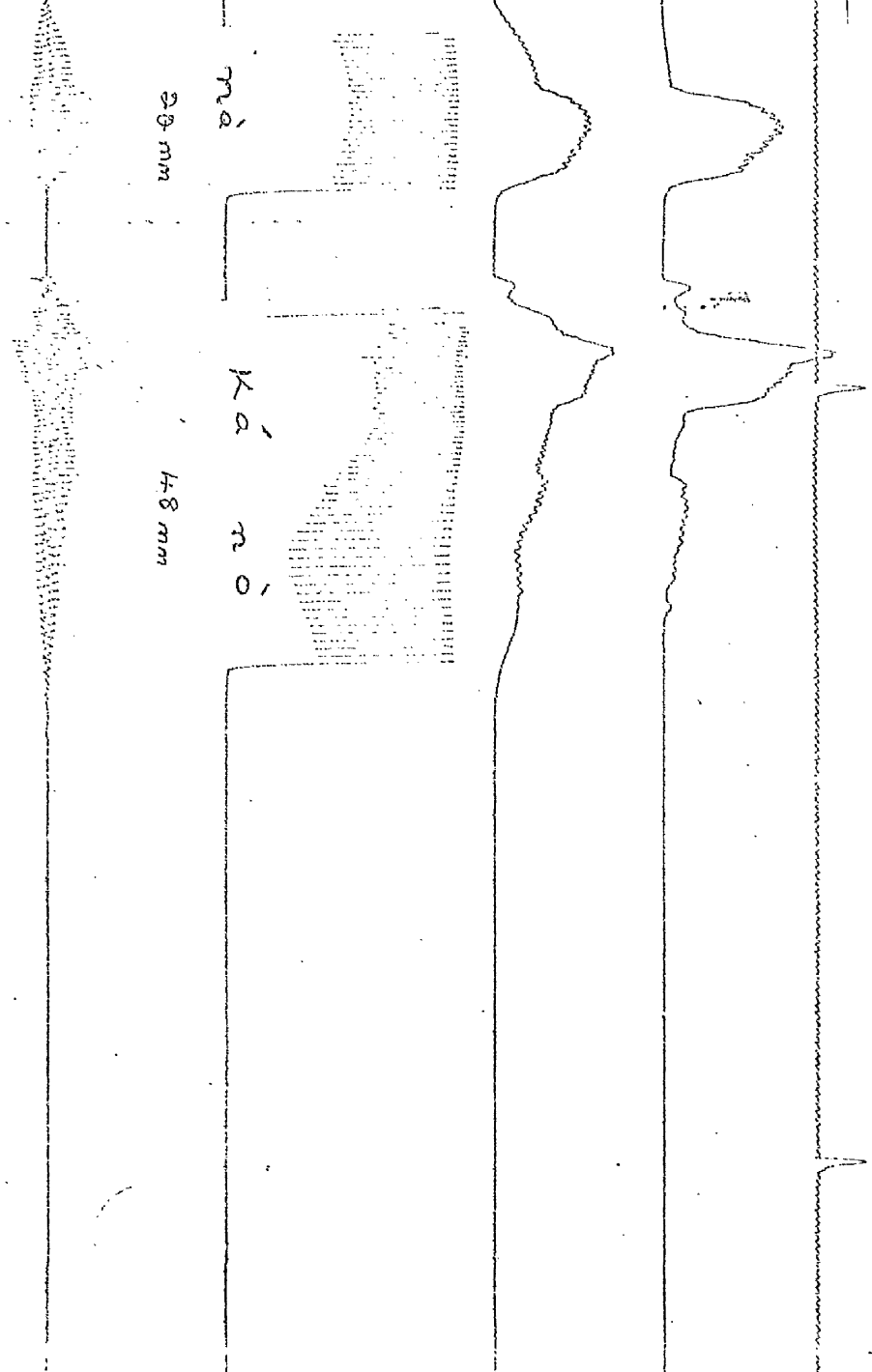
28 mm

ná

48 mm

Ká

nó



1st Portion2nd Portion

Nà # àkpa

nàakpa 'in the bag'

Nà # áka

náaka 'on the hand'

nà # úthù

núuthù 'on the penis'

Nouns beginning with high and low pitches have been used after the preposition Nà. The result is as follows:

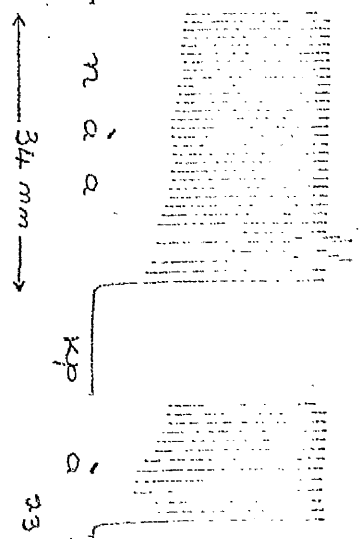
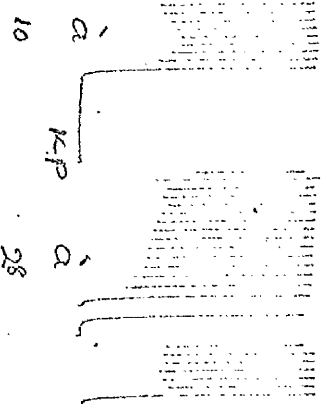
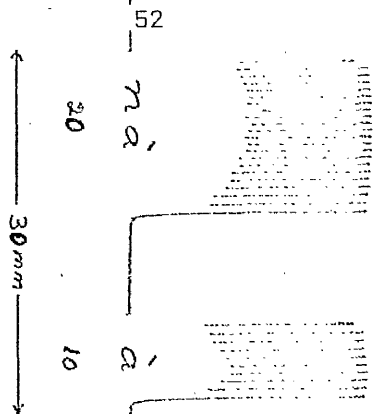
- (i) In all cases, regardless of whether the noun following Nà begins with a high or low pitch, the duration nà and the following syllable in the first portion is of a shorter duration than the corresponding number of syllables in the second portion showing assimilation. On page 52, it is 30 mm. in the first, but 34 mm. in the second portion; 35 mm. in the first portion but 40 mm. in the second half of both pages 53~~54~~.
- (ii) But this difference is very negligible when one considers the fact that one second in time on these mingograms is represented by 100 mm. What matters is the tendency for the assimilated portion to be slightly longer in duration than the unassimilated first portion, and not shorter.
- (iii) This result thus confirms our stand that what is involved in Igbo prepositional phrases is assimilation or change of vowel and not the loss or deletion of it. Contrary to Rev. Igwe's claim that high tones are deleted when preceded by the preposition nà, it turns out to be the verifiable fact that both high and low pitches are subject to assimilation, and that none of them is subject to deletion.

Types of Assimilation

Three types of assimilation need be distinguished in Igbo:

- (a) Phonemic (Regressive) assimilation
- (b) Tonemic (Low-tone) assimilation
- (c) Coalescent assimilation

Nā' akka



Na⁺ aka

53
Na⁺
25
35 mm
10
a

Ka
30

Na⁺
40 mm

K

a
26 mm

na' 24
35 mm u'

th

u' 22

nu' u 40 mm

th

u' 21

Nu' u th u'

These three phonological features are independent of one another. The second type seems restricted to our dialect, or at least, it does not occur in the Green and Igwe dialect. In our dialect, Tonemic assimilation is limited to those nominals with inherent/lexical tone pattern of low-high such as òké (rat), òfó (symbol of justice). The second and third types are far more wide spread features of the Igbo language; the second is a general phenomenon of continuous speech, while the third, Coalescent assimilation, obtains only in a specific phonetic context which will be made clear in the appropriate section. Although the first and last types of assimilation are wide spread, we have not come across any description of either of them in print. This may well be the first account of them in the literature of the Igbo language. Let us now examine with illustrative examples, each type of assimilation, in the order given above.

2.2.1 Phonemic (Vowel) Assimilation

Listening to the speech of an Igbo speaker, one cannot easily tell where one word ends and the other begins. This is due to the fact that across word boundary two adjacent vowels are subject to assimilation, the following vowel being the assimilating, the preceding one, the assimilated vowel. This is Regressive a[Óríðííri] because the assimilating vowel follows the assimilated one, as the following examples show:

- 17 (a) Ó gára óry [Ó gárqóry]
 He went to work.
- 17 (a) Ó gára óry [Ó gárqóry]
 (u) érie ány
 Do not eat meat.
- (c) Ó ríghé íri [Óríðííri]
 He is (busy) eating.

(d) ɔ́ gbāshàrà uwé yā n'anwū

[ɔ́ gbāshàruuwíēnaanwū]

He spreads his clothes out in the sun.

(e) ɔ́ rīrī anụ (i) [Órīryaanụ]

(ii) [Órīraanụ]

He ate some meat.

In all these examples, it will be observed that it is the preceding vowel which assimilates to the following one across word boundary. Furthermore, in 17(e) there are two possibilities; (e) (i) with the /y/ off-glide shows what happens when the tongue moves from the very high front sound /i/ to a low back one /a/, and (e) (ii) follows the pattern of other examples of 17 in having no y off-glide.

It has been observed by Rev. Igwe (1974) that "when the close vowels i/i and u/ü occur as final vowel in a morpheme, no elision (our assimilation) takes place between it and the initial vowel of the next morpheme whatever type the latter may be" (p. 32). He cites the following examples, besides which we add our own realisation of the same phrase.

18 (a) Igwe's

Ours

ísi ɔrnū

íshi ɔrū

[íʃɔɔrū]

[íʃyɔɔrū]

(b) ùdí -elē

[ùdyeelē]

the appearance of the deer

(c) égwu ɔnwā

[égwɔɔnwā]

monn-light dance

(d) ɔ́rū ɔchie`

[ɔ́roochie`]

old piece of work

[ɔ́rūɔchie`]

(e) égwu aghā

[égwuaghā]

war dance/music

[égwaaaghā]

To the above, we may add the following which is not a proper name:

(h)	ùsọ́	≠	ékhwu	→	ùséekhwū	→	ùséekhwū
	extreme		hearth				kitchen

As the arrows indicate, we have assumed that vowel assimilation precedes vowel elision, though this assumption is not crucial to the fact that vowel elision - that is, loss of vowel - does take place in these lexical creations. These examples do not, of course, imply that the formation of every new lexical item in Igbo will necessarily entail vowel elision; on the contrary, only a small lexical group - proper names - do permit of this process. We have not tried to discover any constraints, if any, on the operation of this vowel elision in some Igbo lexical creations, since such a subject is outside the scope of the present investigation, but what the data of 19 do strongly suggest is that there should be a separate phonology for proper names in Igbo, as is the case in such languages as Hausa, Bachama and Yoruba.

2.2.3 Tonemic (Low Tone) Assimilation

Our investigation shows that Tone assimilation is restricted to a class of nominals with an inherent low-high, or low-high-low, or low-high-high. This group of items includes the following:

òfọ́	symbol of justice, Justice
àkhwá	egg
òkúkò	fowl
òmúgwò	post natal period, confinement of a mother
òpyípya	penance, contrition
òrírí	feast edible

Whenever nouns of the above tone patterns are preceded by an item ending on a high tone, be it a noun or verb, they have their initial low tone raised to the level of the two adjacent high tones: This always happens in

- (i) CAUSAL CLAUSES beginning with N'ébe, 'since'
- (ii) NEGATIVE Imperative constructions.
- (iii) Whenever members of this class of items are in object position after high-tone verbs.

The following are illustrative examples; the relevant items whose low tone has been assimilated are underlined.

20 (a) N'ébe oke nwūrūna, wèlāghani ɔnyà

In the place rat has died, send back then trap

Since the rat has died, return, then, the trap.

(b) N'ébe akhwa ǎ rēcherele, lufùnéé ñā

Since eggs these have rotten, throw away them.

Since these eggs have become rotten, throw them away.

(c) N'ébe iwu mara yā, ya mēé àkhu

Since law traps him he pay fine

Since he is guilty, let him pay a fine.

Causal Clauses beginning with N'ébe are Relative clauses; one would, therefore, expect the same tonal behaviour from these items in Igbo Relative clauses given the same tonemic context. This is really what happens in the following 21 (a-f) which contain relative clauses:

21 (a) Ónye ɔkúkò yá fùru, yá jhè jùọ Èkhe

Person fowl his miss he go ask Ekhe

Anybody who loses a fowl should enquire from Ekhe.

- 21 (b) Àgbòghò òmúgwò chāra adīi na nkohyè
 young woman who òmúgwò brightens is not in mistaking
 The young mother on whom there is strong evidence of post-natal care (òmúgwò) cannot be mistaken.
- (c) Ònye ofò gbūru, ya elēle madhū ánya n'ihu
 person whom ofo kills he look not person eye in face
 He who has been penalised by Natural Justice should not look round for a scape goat.
- (d) Òkoro agboghò kwèrè dí, Ò jikwe ég'o?
 young man whom a young lady agrees marriage, he has money?
 The young man to whom a young girl has given consent, has he got the money?
- (e) Òhĩa oke jūru n'imē ya nà atú ụjò
 Bush which rats full inside it causes fear
 A wood which is full of rats is frightful.

Negative Imperatives

In this construction type, as in Causal N'ebe clauses, the same tonal behaviour is displayed by this class of items, thus:

- 22 (a) Ácōla ụba ahwà.
 Look for not wealth much: Do not go after much wealth.
- (b) Écēle Ụfomba tháà
 Do not wait for Ụfomba today.
- (c) Ákpōla Okoro mgbu í jhè
 Do not call Okoro when you are going.

As Objects of High-Tone Verbs

23 (a) 0' rīri akhwa
He ate some eggs.

(b) 0' rūrū ōfo
He contravened Natural Justice.

(c) 0' kpōrō anyī' oriri
He called us feast: He invited us to a feast.

Now contrast the tone pattern of the underlined nouns in 23 with their tone pattern in the following 24

24 (a) 0' rīele ākhwa
He has eaten some eggs.

(b) ōnya' m' āmagbuole ōke
Trap my has caught rat: My trap has caught a rat.

(c) I' rūrōla ōfo
You have contravened Natural Justice.

It will be observed that rather than maintaining the same level as the preceding high tone, the relevant syllable of these same items is on lowered high or downstep relation to the preceding high tone. Yet it is the same tonal assimilation that is going on. What seems to determine whether it is a high or downstep tone is a combination of the following factors:

- (a) The presence of a previous downstep in the sentence, and
- (b) The number of syllables on the same level as this downstep before the following downstep on the class of items being considered here.

Contrast the following two sentences, for example:

25 (a) Égbuole m̄ oke: I have killed a rat.

(b) I' gbūole ōke: You have killed a rat

In 25 (a) òké merely assimilates to the immediately preceding downstep, but in (b) there is a further downstepping on òké where the distance, measured in terms of intervening syllables, is longer. But since phonology is not our immediate concern in this thesis, we do not pursue this investigation any further. It is sufficient to point out that all these tonal phenomena are exponents of tonemic assimilation.

Before we leave this aspect of assimilation, we must emphasise that tonemic assimilation does not take place if the items involved have either of the following tone patterns:

(i) low-low such as àla or

(ii) low-low-high such as òmumé

For it to take place, the initial low tone must be immediately followed by a high tone. Consider the following examples in the light of the above statement:

26 (a) Ìkẹ́ è wú onye iwú yā nà eshí ikhē

(b) " " " " àla yā nà áfù ùkà

(a) This is the one whose law is strict.

(b) " " " " " piece of land is the subject of dispute

(c) Ìkẹ́ è wú onye òkúkò yā fùru.

This is the one whose fowl got missing.

(d) Ìkẹ́ è wú onye òmumé yā nà amáshì m̄

This is the one behaviour his does please me

This is the one whose behaviour pleases me.

From the above data, it will be observed that low-tone assimilation has taken place in 26(a) and (c) where the lexical items, iwú and òkúkò have the appropriate tone pattern, but not in (b) and (d) where the items àla and òmumé do not meet the tone pattern requirement for low-tone assimilation.

if the following nominal begins in a vowel; it is only tonemic but not phonemic, if the following nominal begins in a syllabic nasal; there is no assimilation whatsoever, if the following nominal begins in any consonant other than the already mentioned syllabic nasal (27 (e-f)).

Complete (phonemic and tonemic) assimilation (27(a-c)) is not dependent in any way on whether the initial tone of the following item is either high or low; it takes place regardless of the pitch of the adjacent syllable. As we have pointed out earlier on in 2.1.1., the number or duration of the two syllables involved remains unaffected by the process of assimilation by which we understand a change of phoneme at word boundary, and not an elision or loss of the same phoneme. Such orthographic conventions as

n'íshi for ná'ishi/níishi

n'úlo for ná'ulo/núulo

n'àla for nà'ala/nàala

must be seen as such, and not confused with phonetic facts.

The rules to capture this unique feature of Igbo Prepositional Phrases remain as given by M. S. Rules 2(a)-(c).

2.2.4 Coalescent Assimilation

Daniel Jones defines coalescent assimilation in the following words: "the sounds A & C influence each other and coalesce into the single sound B" (p.219). This seems to be what is happening in the following Igbo examples:

28(a)	<u>Orthography</u>		<u>Phonetic Realisation</u>
	íshi	yā his/her head	[i'ʃiē]
(b)	àkpí	yā - its louse -	[àkpíā]
(c)	égbè	yā - his gun -	[egbie]
(d)	úkwù	yā - his waist	[úkwíé]
(e)	úkwù	yā - his foot -	[úkwíā]
(f)	òkpo	yā - his path -	[òkpié]

29(a)	Ó nyèrè m' ya	[Ónyèrémíá]
	He gave me it:	He gave it to me.
(b)	Ó nyèrè gí ya	[Ónyèrègíá]
	He gave you it:	He gave it to you.
(c)	Ó nyèrè yá ya	[Ónyèríéyá]
	He gave him it:	He gave it to him.
(d)	Ó nyèrè anyí ya	[Ónyèraanyíá]
	He gave us it:	He gave it to us;
(e)	Ó nyèrè únú yá	[Ónyèruúníé]
	He gave you it:	He gave it to you.
(f)	Ó nyèrè ñá' ya	[Ónyèrèñhíá]
	He gave them it:	He gave it to them.

The phenomenon could be represented in the following way:

M.S. Rule 6 V ≠ Ya → IA

/I/ will of course be realised as either [i] or [í] in harmony with the preceding vowel, and will in turn determine the phonetic value of /A/, the vowel of ya, as the data of 28 reveal.

Coalescent assimilation is not structure specific, it takes place whenever the phonological environment for it is met, that is, in environment

[cv] — but not in [cv] [v] —

In other words, ya must not be preceded by two consecutive vowels in order for coalescent assimilation to take place; the following illustrate the point

- 30(a) Bhá' yā → [bhíā] Grab/get hold of him
- (b) Bhaá' yā → *[bháíā] Enter/get into it
- (c) Gbúó yā → *[gbúíē] Kill it
- (d) Nyé' yā eg'o → [nyíēeg'o] Give him/her money

The starred examples in 30(b) and (c) are not phonetically possible because of the preceding consecutive vowels in each case. We have not come across any mention of coalescent assimilation in Igbo anywhere before.

2.3

AFFIXES

In this section, we shall set out all the inflectional affixes (Prefixes and Suffixes) which function in this dialect, and we also provide appropriate sets of examples to illustrate their use.

As we made clear at the beginning of this chapter, the role of affixes in the inflectional morphology of Igbo has been either misunderstood or very narrowly understood. Dr G. E. Igwe, who with Miss M. M. Green produced the first ever comprehensive grammar of Igbo in 1963, still holds the view that suffixes are optional elements in verb inflection: "It has been erroneously assumed that the suffixes -ghI and -lA were necessary elements in Negative Clauses. But what will be stated very emphatically is that no suffix of the language, including the vowel suffix, has to occur obligatorily in any construction type, whether Imperative or Non-Imperative, Negative or Positive. Suffixes occur only when the particular function which they indicate are present in the constructions".³

We find it very difficult to accept this view of Dr Igwe's in the face of strong evidence to the contrary from our own dialect, which must be considered a dialect of the Igbo Language. It is still too early in the study of the Igbo Language to make such a global statement as the above quotation from Dr Igwe's thesis.

Contrary to what Dr Igwe says, we believe that in Igbo, as in any other language, it is possible to omit certain grammatical forms of language provided that there is a contextual clue as to the meaning of the omitted forms. Consider the following Igbo sentences in the light of this observation:

3 G.E. IGWE, University of London Ph.D. thesis, p. 155.

28(a) ń jhè áhya mgbu m ñwùrù yá
 He was going to market when I saw him.

(b) ń jhèrè áhya (ecwí gāra āga)
 He went to market (yesterday).

In the above 28(a) & (b), it will be observed that the past time suffix, *rv*, is an obligatory element of one of the verbs: in (a) it is present in the verb of the subordinate clause ñwùrù - 'saw', which gives the entire construction its time reference. In (b), it is the main verb of the sentence that bears the time suffix. This suffix is never optional in any dialect of Igbo that we are aware of. The effect of omitting this time suffix is to produce the ill-formed 28(c) in spite of the presence of a subordinating clause of time. On the other hand, 28(b) above is well-formed whether or not there is a time adverbial clause simply because the time-indicating suffix is present in the verb.

(c) * ń jhè áhya (eci gāra āga)
 He is going to market yesterday.

Furthermore, in the absence of any study of Igbo verbs, it will be very difficult to support a statement which claims that suffixes are optional in verb inflection in Igbo.

optional in verb inflection. A random sample of verbs from the language suggests the recognition of the following sub-categories of verbs on syntactic or phonological grounds:

- (a) those verbs which obligatorily take the open vowel suffix, and
- (b) those that do so optionally - in certain construction types.

The construction types which provide the diagnostic tests are:

- (i) Imperative Affirmative
- (ii) Perfect Tense "
- (iii) Conditional Clauses and
- (iv) Narrative Constructions

Thus, in Imperative Affirmative; we have

- 29(a) $\dot{h}w\acute{u}$ yā but not $*hw\acute{u}o$ yā
 see him
- (b) $gb\acute{u}o$ yā but not $*gb\acute{u} y\bar{a}$
 kill it/him
- (c) $r\acute{ie}$ yā but not $*r\acute{i} y\bar{a}$
 eat it

In the Perfect and Narrative forms, the same feature is displayed:

- 30(a) $\acute{O}gu$ $\dot{a}hw\acute{u}na$ $nwi\grave{e}$ ya'
 Ogu has seen his wife
- (b) $\acute{O}gu$ $egb\acute{u}ole$ $nn\grave{u}nu$
 Ogu has killed a bird
- (c) $\acute{O}gu$ $er\acute{ie}le$ $nn\grave{u}nu$
 Ogu has eaten a bird

- 31(a) $\acute{I}be$ gara $\acute{u}lo$ $\acute{o}gw\acute{u}$, $hw\acute{u}$ nwanne ya
 Ibe went to the hospital and saw his brother/sister.
- (b) $\acute{I}be$ khworo ala $gb\acute{u}o$ nwanne ya
 Ibe regarded land and killed his brother/sister.
 Ibe killed his brother/sister because of land.

32. Ibe shichere ánu , rie yā

Ibe finished cooking meat, and ate it.

It will be observed that this vowel suffix is consistently taken by verbs like igbū, and írī in all these construction types, ihwū, on the other hand, consistently does not take it. But when, in perfect tense, and perfect tense only, ihwū takes an open vowel suffix, a new element of meaning emerges thus:

33(a) ĩ hwūona yā (thā)?

Have you ever seen him (today)?

(b) Ee, ahwūona m̄ ya.

Yes, I have once seen him.

33(a) and (b) suggest that there is not just one, but two, or possibly more vowel suffixes in Igbo, one inflectional, and the other meaning-modifying. The same may apply to the -rə suffixes; there may be many more of them than have been so far recognised. Since a sub-categorisation based on these inflectional characteristics must be recognised in a thorough study of Igbo verbs, it is a bit premature to talk in terms of suffixes occurring when the function they perform is present. We pursue this subject in greater detail in the following section 2.3.1 where we show that there is nothing random or optional about the occurrence of these or any other Igbo suffixes.

2.3.1 INFLECTIONAL PREFIX AND SUFFIXES

The following prefix and suffixes are obligatory and inflectional in the dialect being described here. It is very similar to that described by Swift, Ahaghotu and Ugorji in IGBO BASIC COURSE, 1962. Foreign Service Institute, Washington D.C.

In view of the fact that reference will constantly be made to verbs in the examples which follow, we have adopted the following classification of verbs after the suggestion of Professor Carnochan (1966).

VERB	CLASS 1	for high-tone verbs such as ířĩ to eat.
VERB	CLASS 2	" low tones verbs such as ídha to fall.
VERB	CLASS 3	for those verbs formerly classed as High-Low verbs, such as ígā, 'to go', íbyā, to come.

This class comprises verbs which in one construction type behave as high, and in another as low tone verbs. For example:

- 34(a) 0' gāra áhya: He went to market.
 (b) 0' gāla ahyā: He has gone to market.
 (c) Yá' gāá ngwañgwa: Let him go quickly.
 (d) Yá' gaa ngwañgwa: If he goes quickly

Thus Class 3 verbs will tonally behave like members of Class 1 in some construction types, and like Class 2 verbs in others.

A fourth group, Verb Class 4, may be recognised along the line suggested by Dr Igwe, in his thesis (p.45), this is the class of compound verbs. Despite Dr Igwe's argument to the contrary, there is a lot to be said for Professor Carnochan's suggestion that these classes of verbs should be sub-classified according to those which take or do not take the vowel suffix - Ó/Á. The situation is that on phonological grounds alone, some members of these classes will obligatorily take the vowel suffix, while for others its presence is optional. As we observed earlier on, for all verbs ending in the highest front and back vowels [i] and [u], a harmonising vowel suffix seems obligatory, for other vowels, it seems optional - a fact which suggests a re-examination of the vowel suffix along phonological rather than strictly syntactic lines.

In the rest of this section, we shall set out the relevant prefix and suffixes, illustrating their use as we go along.

(i) The Open Vowel Prefix, A-

The symbol, A- stands for the harmonising vowel prefix the presence of which constitutes the diagnostic test for Green and Igwe Subject Verb Form II. It is found in

- (i) all Negative verb forms in this dialect
- (ii) Perfect verb forms
- (iii) Narrative verb form, Non-initiating
- (iv) the verb form of Subject-Verb Inverted construction
- (v) it also stands for the Indefinite Pronoun Subject in the Igbo pronominal system.

In this dialect, therefore, the verb form representative of (a-d) above is of the following morphemic shape:

[A + cv + suffix.] (Prefix + verb-stem + suffix)

Verb

We thus agree with Dr Carrell's analysis of the same verb form, although Dr Igwe disagrees with both of us. For the time being, two examples of each type will suffice to illustrate the point here, since the rest of this chapter is devoted to a full illustration of various construction types and the type of verb forms they permit.

Negative Constructions:

35(a) Ógù éríbèlè hwé ke mgbú ùtutù.

Ogu has not eaten thing since time of morning:

Ogu has not eaten anything since morning.

(b) Òbí ajùghaḡhii unù hwé mēreḡnī

Obi is asking not you thing which happened:

Obi is not asking you what happened.

Narrative - Non-initiating

- 35(c) Anyị́ agádu; ya āgwachaa ānyị okwu
 We reached and he told complete us words:

(And) we reached, he talked to all of us.
 (when)

- (d) Ya' āhwu m, gbawa osō.
 And he saw me, and started running.

Verb - Subject Inverted Construction: This subject verb inversion is possible only with the first and third person singular pronoun

- 35(e) Ágara m áhya
 Went I market: I went to market.

- (f) Ébídhole ñí ígā akwukwọ
 Started have they going School: They have started going to School.

Perfect Verb Form

- (g) Unu ańuona mai m dhoro
 You have drunk wine I left: You have taken the wine which I left.

- (h) Anyị́ agwala yā otho i kwuru
 We have told him manner you said:
 We have told him as you said.

Indefinite Pronoun Subject

- 36(a) A' luru og'u n'ahya.
 One fought fight in market:
 People fought in the market.

- (b) É gbūcere mma n'og'u oñi
 One cut even matchets in fight that: People even matcheted themselves in that fight.

2.3.2 SUFFIXES - The Open Vowel Suffix -O/A'

This suffix which is associated with affirmative verbs is to be found in the Perfect form of the verb as well as in the following construction types:

- (i) The Imperative
- (ii) The Narrative
- (iii) Conditional Clauses A (Open Conditions)
- (iv) The Perfect tense/aspect of the verb.

In order to illustrate what happens in the above construction types, the following representative verbs have been chosen:

37 (a)	írī	(vb cl. 1)	to eat
(b)	ili	(2)	" bury
(c)	itī (mkpu)	(3)	" shout
(d)	irē	(1)	" sell
(e)	ig'e (nthi)	(2)	" listen
(f)	imē	(3)	" do
(g)	irī	(1)	" crawl (of insects)
(h)	ici	(2)	" laugh
(i)	imi	(3)	" dry over the fire
(j)	irā	(1)	" leak, eat
(k)	idha	(2)	" fall
(l)	igā	(3)	" go
(m)	ikō (akuko)	(1)	" narrate
(n)	iko	(2)	" plant
(o)	igō (ago)	(3)	" deny
(p)	ifū	(1)	" pain
(q)	ifu	(2)	" go out
(r)	inū	(3)	" hear
(s)	itō	(1)	" grow
(t)	ito	(2)	" praise

37(u)	íló	(vb. cl.3)	to swallow
(v)	ígbū	(1)	" kill
(w)	ífu	(2)	" get lost
(x)	íkwū	(3)	" talk, say

The following are illustrative examples of their use in the following construction types.

(i) Imperatives

- 38(a) Ríé yā Eat it!
- (b) Lié yā Bury it
- (c) Tie mkpū Shout out
- (d) Réé mānu kòbò irí
Sell the oil kobo ten: Sell the oil ten kòbòs.
- (e) G'èé ní nthí n'ókwu yā
Listen you ear to word his: Listen to him, you people.
- (f) Mèé hwe o gwàra gí
Do thing he told you
- (g) Éjù, ríá n'àla (a hypothetical situation)
Snail, crawl on the ground!
- (h) Cíá (oci) mú ēlee.
Laugh (laughter) let me see.
- (i) Míá ažu n'ókhu
Dry the fish over the fire.
- (j) Ráa epe níile fōrō ní
Eat oranges all which remain:
Eat all the remaining oranges.
- (k) D(a)á⁴ n'àla, bewé akhwā
Fall on the ground start crying cry:
Fall on the ground and start crying.
- (l) Gà(á) ngwaṅgwa, bikhō
Go quickly, please

- (m) Koo akuko bhāra urū.
Narrate story which is useful: Narrate a useful story.
- (n) Koo ji tupu i koo ede
Plant yams before you plant cocoyams: Plant the yams
before the cocoyams.
- (o) Goo agō gbuò, mú ākugbuo gĩ
Deny denial now I beat will you: If you deny
now, I will beat you up.
- (p) Ya fuo m̄ ufu
It pain me pain: Let is pain me.
- (q) Fū(o) osiiso
Go out immediately.
- (r) Nū hwe ekwughe hi
Hear thing are saying they: Hear what they are saying.
- (s) Too thā, too eci
Grow today, grow tomorrow: Grow very rapidly.
- (t) Too yā maka hwe oma yā niile
Praise him for thing good of him all: Praise him for all
his good works.
- (u) Loo yā
Swallow it.

4 We have used the circular brackets to denote that the open vowel suffix is optional in the relevant examples. If the imperative verb form is the simple (unsuffixed) verb stem, then its tone is determined by the following consideration - thus: if the following item begins on a low tone, then the tone of the simple imperative verb must be high, but low, if the following item begins on a high tone:

Fū	n'ama:	Go out to the road - but not
*Fū	"	
dha	n'ala:	Fall to the ground, but not
*dha	"	

So far only verbs of Tone Class 2 & 3 are known to behave in this way.

- 38(v) Gbúó yā Kill it
 (w) Lúfúó yā Throw it away
 (x) Kwúó ñwē i còrò
 Say thing you want: Say what you want.

(ii) The Narrative

The verbs in the Narrative form are underlined.

- (a) ..Yá' ērie hwē n'anyāšū

And he ate something in the evening

- (b) Mgbu é mèchere, e lie yā

When one finished, one buried him: They buried him afterwards.

- (c) Ndi ohī byàrà, anyī etie mkpū

Thieves came and we shouted.

- (d) Anyī gara áhya, ree eghū

We went to market and sold the goat

- (e) ..Há' ābya g'ee' nthī n'ókwu yā.

And they came and listened ear to words his:

.. And they came and listened to what he had to say.

- (f) Ó' bèchere ákhwa, bya mee ñwē a gwàrà yá.

He complete cried cry come did thing one told him

He finished crying and then did what he was told.

- (g) Éjū aria, ešū āria

..Snails crawled about and millipedes crawled about, too.

- (h) Ó' kwuru - - ókwu, anyī acia.

He talked and we laughed.

- (i) ..Yá' ēgbute azy, mia ñhā n'ókhu

And he caught fish and dried them over the fire.

- (j) Imo' ghotara epe raa

Imo plucked some oranges and ate.

39(k) 0' nyūjhe elu, dha(a).

He was climbing and fell: He fell while climbing.

(1) 0' shīri ulo ōrū ga(a) ahyā

He went through house of work went market: He went to the market from his work place.

(m) 0' fūtara koo otho ñha jiri mee

He came out and narrated manner they used and did:

He came out and told us how they got on.

(n) Anyi koro jí, koo ede, koo akpū.

We planted yams and planted cocoyams and planted cassava:

We planted yams, cocoyams, and cassava.

(o) 0' mèchere qoo okwu niile o kwuru.

He finished and denied words all he said:

He finally denied everything he had said.

(p) 0' mere yá ogwu, yá āfuō m ufū

He did it medicine, it pained me pain:

He applied some medicine to it, and it pained me.

(q) 0' gātara ná mgbawa fū(o)

It went through crack and went out: It escaped through a crack (on the wall).

(r) Anyi noro n'ezhi nu okwū ya.

We stayed in compound and heard word his: We heard him from outside.

(s) .. Nwa yā nwokhō ētoo dīmkpa

And son her male grew a man:

And her son grew to become a man.

(t) Ĥa jiri ukwé ná ékpere tōo Chinēkè.

They used songs and prayers praised God:

They praised God with songs and prayers.

(u) 0' māñīi ama loo yā

He did not know and swallowed it: He unknowingly swallowed it.

39(v) Ọ́ ńwùrù ág'ù, ǵbuo yā

He saw a lion and killed it.

(w) Anyị ɔlākara yā fùo n'ime ọhyā

We searched for him and lost in the forest: We kept on searching for him until we got lost in the forest.

(x) A' mānyere ya, ya ẹkwuo hwe dī ya n'obi

One forced him and he said thing which is to him in mind:
He was forced to say what was in his mind.

(iii) Conditional Clause A - Open Condition

In view of the fact that the ability of any verb in Igbo to take the open vowel suffix in question does not depend on its tone class, but on the quality of its final vowel, we shall restrict our examples here and in the following sub-section to just one verb representing its tone class. We shall give more than one example of each class of verbs only in cases where such examples present a contrasting behaviour. By so doing, we hope to cut down on the number of examples rather drastically, without detracting from the point being illustrated here.

40(a) Gí ɹie anū, mu ẹrie aẓū

If you eat meat, I shall eat fish.

(b) Gí ɹee eghū m, agà m agbára gí akwukwo

If you sell goat my shall I summon you paper:

If you sell my goat, I shall take you to court.

(c) Ụkpará ahị ɹia yā n'ahú, ya ẹtete

If grasshopper that crawls it on body, it wakes.

If that grasshopper crawls on to its body, it will wake.

(d) Yá ɹaa shī, è mēshie yā ikhe.

If he eats mess, one treats him hard(idiomatic):

If he should become unruly/rude, he will be severely dealt with.

40(e) Gi' dha(a) I' ga' imeru ahu

If you fall you will wound body: If you should fall, you will be hurt.

(f) Ya' ga(a) nkhu, anyi' aga(a) miri.

If he goes for firewood, we shall go for water.

(g) Unu' koo hwe unu' byara, anyi' agwa unu'

If you narrate thing you came for, we tell you hwe' anyi' cere.

thing we think: If you tell us the object of your mission, we shall tell you what we think (about it).

(h) Ogwu' ohi fuo ya' ufu, ya ebewe.

If medicine that pains him pain, he start crying:

If that medicine should cause him some pain, he will start crying.

(i) Ya' fu(o), anyi' alawa: If he goes out, we start going.

(j) Ya' nu okwu anyi, obi ga ajo' ya njo:

If he hears words our, heart will be bad to him bad:

If he hears our utterances, he will feel offended.

(k) Ya' too, ya amia' mkpuru

If it grows, it will bear fruits.

(l) Gi' gbuo madhu, e gbuo gi'

If you kill person, one kills you: If you commit murder, you will be killed.

(iv) The Perfect Tense/Aspect

41(a) Amandikwa eriele (idiomatic)

Amandikwa has eaten: Amandikwa is lucky.

(b) O' reele moto ya'

He has sold his car.

(c) Eju' ariala laa. (idiomatic)

Snail has crawled and gone: Something good has escaped us.

- 41(d) Áraala m̃ epè níìle fōronī
 have eaten I orange all which remain:

I have eaten all the remaining oranges.

- (e) Nwa' ahi' {adha' la'
adhaa' la'}
 Child that has fallen: That child has fallen

- (f) O' gāla ahyā
 He has gone to market.

- (g) O' gāala ahyā
 He has been to market (and back).

- (h) O' kōola hwe mērenī
 He has narrated thing that happened: He has narrated what
 happened.

- (i) Onya' ahi' afuola yā ufū nke úkwu
 Wound that has pained him pain very much:
 That wound has given him a lot of pain.

- (j) O' fū la'
 " fūola He has gone out

- (k) I' nū na hwe mēre nī?
 Have you heard what happened?

- (l) I' nuona hwe mērenī
 Have you ever heard what happened?

- (m) Nwa' yā etoole
 Child her has grown: Her child has grown.

- (n) Ibe' egbuole eghu wā
 Ibe has killed goat the: Ibe has killed the goat.

Throughout these examples, the same set of verbs given in 37 have been used. These verbs are representative of all the tonal classes given at the beginning of this section; furthermore, they represent all the vowels that possibly may end the citation forms of Igbo verbs, ranging from the highest from vowel to the highest back one. The examples based on these

verbs provide strong evidence in support of our view that it is neither fortuitous nor irregular that some Igbo verbs take the open vowel suffix obligatorily, while others do so optionally. The determining factor seems phonological, rather than syntactic.

The essence of the data presented in 37-41 is to show the consistency of Igbo verbs in taking the open vowel suffix either obligatorily or optionally in the relevant construction types given here. From the above data, the following facts emerge:

- (i) If a verb takes the open vowel suffix obligatorily in its imperative form, it does so consistently in all the construction types listed here; if the vowel suffix is optional in its imperative, it remains so in all the relevant construction types.
- (ii) all verbs whose citation form ends in the high vowels *i*, *e*, *u* and *o* obligatorily take the vowel suffix, while some of those ending in the relatively less high vowels *i*, *a*, *u* and *o* do so optionally.
- (iii) in some cases where the vowel suffix is optional, its presence in one verb form, as opposed to its absence in the other, may introduce an extra dimension of meaning as in 41(f) and (g).
- (iv) in other cases, it is possible for a verb which does not take this vowel suffix in all the relevant constructions to do so in the perfect form in order to signal a meaning difference. Such is the case with *inū* (37 (r) in examples 41(k) and (l). This phenomenon seems restricted to questions.
- (v) it is also necessary to point out the existence in Igbo of other instances of meaning distinguishing (or semantic) vowel suffix, as in the following examples:

- 42(a) *0' nūna.* He has heard (vb *inū* hear)
- (b) *0' nūona* It has warmed up (vb *inū* to warm over the fire)
- (c) *Miri ānuona* The water has become warm.

in cases such as 42(a) & (b), the vowel suffix only serves to distinguish the two homonyms -

inū	to hear
inū	to warm (liquid) over the fire.

The full details of the situation are yet to emerge from a research⁵ into the inflectional morphology of Igbo verbs.

However, in the face of the phonological and semantic facts presented here, it seems premature to suggest that the open vowel suffix is an optional element in verb inflection. Far from that, its occurrence with any particular verb seems predictable on purely phonological grounds in the first instance. It is after one has predicted those verbs which take the vowel suffix obligatorily, that one can venture to the next statement about those verbs for which this vowel suffix is optional. At this stage, we may have to separate the semantic vowel suffix from the optional but inflectional one in order to arrive at any meaningful general statement about them.

5 What we have sketched here does not amount to such a full scale research, but only shows the regularity of the occurrence or non-occurrence of this vowel suffix in this dialect. Our findings here may be subject to qualification based on new evidence, but they have a fair chance of being basically true. Since verb inflectional morphology is not strictly relevant here, we shall pursue the investigation no further. What we have done here amounts to providing some possible approaches to such an investigation.

44(a) Dikhē nò n'ulo
 ya

Dikhe is { in the house }
 at home }

(b) Èkhe vù ígù

Ekhe is carrying palm fronds

(c) Àmaka kù nwá yā

Amaka is c̄arrying her baby.

(d) Ngozi kwò nwá n'ažú

Ngozi is carrying a baby on her back.

(e) Ug'o ji égbè

Ug'o is carrying/has a gun.

(f) O' wū Okoro

It is Okoro

In the foregoing sentences, all noun subjects, regardless of their tone classes, maintain their inherent tone pattern. This fact reflects one of the differences between our dialect and that described by Green and Igwe, where all tone classes 1 and 2 nouns would be expected to take on an extra low tone thus:

- 44(g) Dikhḗ nò n'úlo: Dikhḗ is in
 (h) Èkhḗ vu ígu: Ekhe is carrying some palm fronds.

(ii) The Present Progressive Suffix -ghA

In this dialect, the verb with -ghA suffix is very commonly used to express an on-going action in place of the alternative construction with the auxiliary verb Na. The suffix is harmonising and assimilates to the tone of its verb stem. As in the case of the simple present with stative verbs, all noun subjects retain their inherent tone pattern. We, therefore, give the following paradigm with pronoun rather than noun subjects.

- 45(a) É ríghē m anu: I am eating some meat
 (b) Í ríghē aẓù You (sing.) are eating some fish
 (c) Ó ríghē aẓù He/she is eating some fish
 (d) É ríghē ji ohuō thaa: One is eating fresh yam today:

People are eating fresh yam today.

- (e) Anyì ríghē ji ohuō thaa: We are eating fresh yam today
 (f) Unu ríghē ji ohuō thaa: You " " " " "
 (g) { É ríghē hì } " " " They " " " " "
 { Ĥá ríghē }

Verbs of tone classes 2 & 3 behave tonally identically here, their stem is on low tone, and so is that of the following -ghA suffix. The following 46 illustrate this fact:

- 46(a) Óvute kèghē umù ndomè ákwà n'otu n'otu (vb. cl.2)
 Óvute is sharing to womenfolk cloth one by one
 Óvute is giving out a piece of wrapper to each of the women.

46(b) Mgbaji gaghakwa áhya du thá (vb. cl.3)

Mgbaji is attending still market reach today: Mgbaji is still trading up till today.

(iii) The Progressive Present with Na

Because of the existence in this dialect of the present progressive suffix -ghA, the alternative form of expressing an on-going action by means of the auxiliary na is much less used. When used in this dialect the Na auxiliary verb is more and more restricted to one of its two functions - that of expressing the habitual action. Thus 47 have the habitual rather than the progressive present meaning:

47(a) Ogu` na ańu` māi
Ogu does drink wine: Ogu drinks (wine).

(b) O`na evu` akwa`
He does carry cloths: He is a dealer in cloths.

(c) O`na } ezu` ohĩ
ji }
He does steal: He is a thief.

(d) O`na } aru` ala
ji }

He does defile the ground: He is a wicked man.

As 47 (c) & (d) show, when na is used to express a habitual meaning, it is in free variation with another auxiliary iji. However, for those dialects of Igbo which do not have any other way of expressing a progressive present meaning than by the use of na, the situation described above does not obtain.

(iv) The Future with ga

The simple future is expressed in most, if not all, dialects of Igbo by means of the complex verb form shown in the following examples:

48(a) O` { ga` abya` } eci
 { ibya` }
He will come tomorrow.

Apart from the falling glide on the noun subjects in 49(a) and (c) above, there is also the additional fact that the -rV verb form in 0hũhũ is always on low tones regardless of the class of verb involved. This fact accounts for the contrasting tone patterns of the same verb in 49(c) and (d).

In the following examples, each member of the three classes of verbs has been used:

- 50(a) É rīri ya iwu (vb. cl.1)
 One fined him fine: He was fined.
- (b) Imo dhara élu ūgba (vb. cl.2)
 Imo fell top of oil bean tree: Imo fell from an
 oil bean tree.
- (c) O' mēre hwe' àlǎ sò nso (vb. cl.3)
 He did thing earth abhors: He committed an
 abomination.

(vi) The Progressive Past with Nà

The popular way of expressing a past progressive action is by the use of the past form of the auxiliary verb, nà followed by the appropriate form of the verb, as in 51.

- 51(a) Ógu { nara } awá ojhi
 { naara }
- Ogu used to saw iroko tree: Ogu used to be a sawyer.
- (b) Onyekwere nara agbáfu m̄gba
 Onyekwere used to wrestle ably wrestle: Onyekwere used to
 be an able wrestler.
- (c) Óg'e i' nàra ekwú ezhi-okwū āgaala
 Time you used to talk true word has gone:
 Gone are the days when you used to speak the truth.

Theoretically, there exists an alternative method of expressing the progressive past - by means of the present progressive suffix -ghA and the -rV time suffix as in 51 (d).

51(d) ? 0' zaghara ama: He was sweeping the road.

But in practice, 51(d) is very rarely, if ever, heard. For this reason, we have not bothered to give any examples based on this form. What happens is that the present progressive -ghA verb form and the past progressive Nà auxiliary form are in complementary distribution: the verb + -ghA suffix is the popular choice for expressing present continuous action in preference to the nà verb form, whereas in the past the Nà form with -rV time suffix has displaced the -ghA+ rV verb form. Thus, the lack of popularity of the Nà form in the present progressive is compensated by its popularity in expressing the past progressive action.

(vii) The Perfect Suffix -lA'~ -nA'

In this dialect, the perfect form of the verb with the high tone suffix -lA' (which is realised as -na if the preceding sound is a nasal or nasalised) is the only affirmative verb form with the open vowel prefix A-; this prefix has been discussed in 2.3.1, and its analysis as the Aorist tense marker by Rev. Igwe (1974) will be re-examined in 2.3.5. In the perfect form, verbs of tone classes 1 & 3 behave identically, that is, the traditional high - low verbs behave as high-tone verbs in this form. The following examples reflect this two-way distinction:

52(a) Ibe eriele ala (idiomatic) (vb. cl.1)

Ibe has eaten ground: Ibe is lucky/fortunate.

(b) Uhocí thāa amāana mmā (vb cl.1)

Day of today has become beautiful: Today is a beautiful day.

(c) Ogu abyala faa (vb. cl.3)

Ogu has come early

(d) Ibe alola n'og'e (vb. cl.3)

Ibe has come back in time.

(e) Ng'a ng'a egbuole gī (vb. cl.1)

Pride has killed you: You are very proud.

52(f) Nwá aḥi ádhálá (vb. cl.2)

Child that has fallen: That child has fallen

(g) Ngozi akáála otho ohi (vb. cl. 2)

Ngozi has said manner that: Ngozi has said so.

Observe that the tone of the vowel prefix varies from high to low in the above examples; two factors are responsible for this: the final tone of the preceding noun subject, or item and the tone class of the verb: If the preceding item ends on a low tone and the verb stem is on a high tone (classes 1 & 3 verbs), then the vowel prefix is on a low tone. It is on a downstep, if the preceding item ends on a high tone. But with a low tone (class 2) verbs, the same prefix is consistently on a high tone regardless of the final tone of the preceding item. A few more examples will make the observation clearer:

53(a) Èkhe ēmeene (vb. cl.3)

Ekhe has done(well): Thanks to Ekhe

(b) Àboki āluola nwānyí ōdo (vb. cl.1)

Aboki has married wife another:

Aboki has married another wife.

(c) Ñjókū ḥi⁶ áfùtáchaala (vb. cl.2) Njoku and company have

(d) Ára yā afuóla ahyā⁷ " all come out.

Madness his has come out to market: His madness is beyond cure.

(e) Úmū-madhū ékhwòróle unū fushia (vb. íkhwò cl.2)

Children of human beings have regarded you (and) come out:

People have come out because of you.

6 ḥi/ha is a pluralising morpheme. For more details, see G.E. Igwe (1974) Chapter 11, especially pp. 183-189.

7. It is the belief among my people that a mad person has a good chance of recovery provided he has not made any public appearance, such as in a market in full session. If his madness drives him to public gatherings and market place, then his chances of recovery are thereby jeopardise, and from this time his relations start to give up any attempt to get him medical attention. For them, the madness has exceeded bounds, it is beyond cure.

As 53 (a) & (b) show, the vowel prefix is on a downstep before a preceding high tone if the verb stem is high, but always on a high tone if the verb stem is low, as in 53(c)-(e).

2.3.4 The Negative Suffixes

As was pointed out in 2.3.1, all verbs in the negative in this dialect take an obligatory harmonising vowel prefix followed by the verb stem and the appropriate suffix. These suffixes include:

(i) The Neg. Imperative Suffix -lA ~ nA

- | | | | | |
|-------|------------------------------------|-------|--------------|------------|
| 54(a) | E ^ˈ rile | Don't | eat | (vb. cl.1) |
| (b) | Af ^ˈ ula | " | go out | (" " 2) |
| (c) | E ^ˈ me ^ˈ ne | " | do, stop it. | (" " 3) |
| (d) | E ^ˈ jhe ^ˈ le | " | go | (" " 3) |

Note that in the absence of any following lexical item, all classes of verbs in the above examples have their stem on a low tone, and the -lA ~ nA suffix is also on a low tone. Contrast this situation with what happens in the following examples 54(e)-(i).

- 54(e) U^ˈnu^ˈ é^ˈjhe^ˈle a^ˈhya th^ˈa (vb í^ˈjhe cl.3)
- You people, go not market today:

You people, do not go to market today.

- (f) H^ˈa^ˈ ekw^ˈule okwu (vb í^ˈkwū cl.3)

Let them not talk.

- (g) U^ˈnu^ˈ emē^ˈne o^ˈtho oh^ˈi (vb í^ˈmē cl.3)

You people, do not manner that: You people, don't do like that.

- (h) U^ˈnu^ˈ ér^ˈile í^ˈri n'ù^ˈtù^ˈtù^ˈ (vb í^ˈrī cl.1)

You people, do not eat in the morning.

- (i) U^ˈnu^ˈ az^ˈala ez^ˈhí gb^ˈuo^ˈ (bv í^ˈza cl.2)

You people, do not sweep the compound now.

As these examples show, the vowel prefix here is consistently on a high tone with all classes of verbs, and the -lA suffix assimilates to the tone of its stem. In this construction type, classes 1 and 3 verbs behave identically in having their stem on a downstep.

(ii) The Neg. Present & Past Suffix, -ghI/-hII

This suffix is used as the direct Negative equivalent of the -rV time suffix, thus:

AffirmativeNegative

55(a) Ó rīri hwe

He ate something

(b) Ó gara ahya

He went to market

(c) Ó zara ama

He swept the road

Ò rihīi hwe (vb cl. 1)

He did not eat anything.

Ò ga hīi ahya. (cl.3)

He did not go to market.

Ò zahīi ama (vb cl.2)

He did not sweep the road.

Observe that this suffix does not co-occur with the -rV time suffix, but is used in place of it. Contrast this with what happens in the following 56-57 where the negative suffix is used along with the present progressive suffix -ghA, and with the auxiliaries na and ga:

56(a) AffirmativeNegative

Ógu zaga mgbe

Ogu is sweeping the parlour

(b) Ibe righe hwe

Ibe is eating

(c) Ekhe gāgha ahya

Ekhe is going to market:

Ekhe is doing some trading

Ógu ázāghāhīi mgbe

Ogu is not sweeping
the parlour

Ibe érighehīi hwe

Ibe is not eating.

Ekhe agāghāhīi ahya

Ekhe is not going to
market:Ekhe is not doing any
trading.57(a) Ó nà áhú māi
He does drink (wine)(b) Ó nàara áhú māi
He used to drink (wine)Ò náhīi àhú māi
He does not drink (wine)Ò náhīi rì àhú māi
He never used to drink (wine).

57(c) 0 gaara mbya:

He would have come

0 gāhii ri ibyā(ni)

He would not have come

From these examples, it is observable that in general the negative suffix -ghI/-hII does not co-occur with the -rV time suffix, except when the auxiliary verbs *inā* and *igā* are involved, as in 57(a)-c). But the same negative suffix freely co-occurs with such suffixes as the progressive -ghA, as 56(a-c) show.

Observe, also, that with classes 1 and 3 verbs, the negative suffix is on a downstep, but on a low tone with class 2 verbs, although all verbs in the negative may have their stem on a high tone, as 56(a-c) show. Verbs of tone class 2 may, however, have their stem on a low tone.

Like the negative imperative suffix, -lA, the negative suffix -hII is on a low tone in sentence-final position, but assimilates to its verb stem, if there is a following item, thus:

58(a) 0 rihi: He did not eat. (vb. cl.1)

0gu { erihi }
 erihi

Ogu " " "

(b) 0 byahi: He did not come (vb. cl.3)

0gu { abyahi }
 abyahi

Ogu " " "

(c) Ekhe { azā hii } Ekhe did not sweep (vb. cl. 2)

0 { zahii }
 zahii

He did not sweep.

59(a) 0gu erihi ifi: Ogu did not eat food. (vb. cl.1)

(b) 0gu abyahi tha " did not come today. (vb. cl.3)

(c) Agbakwuru akahi hwe 0 hwuru (vb. cl.2)

Agbakwuru did not say what he saw.

As in the negative imperative, the open vowel prefix A- is consistently on a high tone regardless of the preceding tone, or the class of verb involved.

This negative construction is so popular that it is very often heard in the daily conversations of speakers of this dialect.

(iv) The Negative Perfect Suffix, -bèle

This is the only suffix in our dialect that maintains its inherent low tones and vowels quality in all contexts;

- 62(a) $\acute{E}g' \text{ } \grave{o} \text{ } \acute{n}\acute{u}$ $\acute{a}h\acute{w}\acute{u}\acute{b}\acute{e}l\acute{e}$ $\acute{h}\acute{w}\acute{e}$ (vb. $\acute{i}\acute{h}\acute{w}\acute{u}$ cl.3)
 $\acute{E}g' \text{ } \acute{o}n\acute{u}$ has not seen thing: (idiomatic)
 $\acute{E}g' \text{ } \acute{o}n\acute{u}$ has never suffered.
- (b) $\acute{O}k\acute{p}\acute{a}n\acute{k}h\acute{u}$ $\acute{e}m\acute{e}h\acute{e}b\acute{e}l\acute{e}$ $\acute{o}n\acute{u}$ $y\acute{a}$ $\acute{t}h\acute{a}\acute{a}$ (vb. $\acute{i}m\acute{e}$ cl.3)
 $\acute{O}k\acute{p}\acute{a}n\acute{k}h\acute{u}$ has never opened mouth his today.
 $\acute{O}k\acute{p}\acute{a}n\acute{k}h\acute{u}$ has never uttered a word today.
- (c) $\acute{O}gb\acute{e}d\acute{e}$ $\acute{a}z\acute{a} \text{ } \acute{b}\acute{e}l\acute{e}$ $\acute{h}\acute{w}\acute{e}$ $k\acute{e}$ $m\acute{g}b\acute{u}$ $\acute{t}h\acute{a}\acute{a}$ (vb. $\acute{i}z\acute{a}$ cl.2)
 $\acute{O}gb\acute{e}d\acute{e}$ has never swept thing since today.
For the whole of today, $\acute{O}gb\acute{e}d\acute{e}$ has never done any sweeping.
- (d) $\acute{N} \text{ } \acute{n}\acute{o} \text{ } \acute{d}\acute{i}m$ $\acute{a} \text{ } \acute{c}\acute{i}r\acute{i}b\acute{e}l\acute{e}$ $\acute{o}k\acute{e}$ $y\acute{a}$ (vb. $\acute{i}c\acute{i}$ cl.1)
" has not picked share his
 $\acute{N}n\acute{o}d\acute{i}m$ has not picked his own share.

As these examples reveal, all verbs have their stem on a downstep in the perfect form, and the vowel prefix is expectedly on a high tone.

It has to be emphasised that -bèle is considered here as a single morpheme on low tones. There is, however, another morpheme -bèlé also associated with the Perfect Aspect in Igbo. This -bèlé occurs only in Interrogative clauses where it introduces the meaning 'ever' as the following sentences illustrate:

- 63(a) $\acute{I} \text{ } \acute{h}\acute{w}\acute{u}\acute{b}\acute{e}l\acute{e}$ $y\acute{a}$ $m\acute{b}\acute{u}$?
You see ever have him before? Have you ever seen him before?
- (b) $\acute{I} \text{ } \acute{h}\acute{w}\acute{u}\acute{b}\acute{e}l\acute{e}$ $\acute{t} \text{ } \acute{e} \text{ } r \text{ } \acute{e} \text{ } n\acute{i}$ $\acute{u}k\acute{w}\acute{u}$ $n\acute{g}\acute{a}$ $\acute{o} \text{ } \acute{s}h\acute{i} \text{ } \acute{u}z\acute{o}$ $\acute{i}g\acute{w}\acute{e}$ $\acute{a}g\acute{a}$?
You see ever have train big as it goes through road of iron?
Have you ever seen the big train as it travels along (its) rail tracks?
- Now contrast (a) and (b) above with (c) where a different shade of meaning is implied:

- (c) $\acute{I} \text{ } \acute{h}\acute{w}\acute{u}\acute{b}\acute{e}l\acute{e}$ $\acute{a}g' \text{ } \acute{u}$ $m\acute{b}\acute{u}$? You see not have leopard before?

Have you not
seen a leopard before?

never

The meaning difference between 48(a) and (b) on the one hand, and sentences like 48(c) on the other, is achieved by the contrastive tones

of the first two items: ĩ́ ĥwū̀bè̀le ? Have you not seen ?

 ĩ́ ĥwū̀bè̀lé ? Have you ever seen?

2.3.5 The Open Vowel Prefix - a re-examination

For the Nà auxiliary verb and a handful of other verbs in Igbo which can be used in an auxiliary capacity, the A- prefix is an obligatory element of the following verb form.

64(a) 0 {ji} ezú ohĩ: He steals/he is a thief.
 0 {na}

(b) ĩ́ ga' agwa' m̄ ñwe I mèghe n'úlò
 You will tell me thing you are doing at home.

 You must tell me what you are doing at home.

(c) ĩ́rò àkazhì ji igwè' evúghe nkwū̄
 " used bicycle carrying palm fruits.

 Iroakazhi is carrying the palm fruits on bicycles.

Before we go on to give a brief paradigm of construction types in this dialect, and the permissible tone patterns in these construction types, we would like to comment briefly on Dr. Igwe's analysis of the vowel prefix A-

The analysis of the vowel prefix A- in his Ph.D. thesis represents a very radical departure from his 1963 analysis with Miss M. M. Green in a Descriptive Grammar of Igbo. For one thing, he has now come to agree with our view that the vowel prefix A- is an obligatory element in all Negative clauses in Igbo, a fact which makes the distinction into Subject Verb Forms I and II untenable in Negative clauses in the language. For another, the re-analysis of this prefix as the Aorist prefix sounds far-fetched. The Aorist tense, according to Dr. Igwe, "represents what might be summarily called "punctiliar" or "punctual" kind of action. It

represents the action denoted by the verb as a 'point. Consequently, the form may represent INGRESSIVE, EFFECTIVE or SUMMARY action: INGRESSIVE, if attention is focused on the fact of the action beginning, without any regard to its continuance; EFFECTIVE, if attention is given to the fact of the completion of the action, and summary, if the action is viewed as simply having occurred, without distinguishing any points in its progress." (p.91). Then Dr. Igwe goes on to argue that it is because of these three possibilities in the meaning of this prefix that in translating the Aorist Tense into English, for instance, the same verb can be rendered by either 'begin to + verb', 'have/has + past participle of verb' (the perfective expression), or simply by 'verb + Past' (the past tense verb). He then supports the foregoing analysis with the following examples:

DECLATIVE II

(6) Ọ́jhi / ekwú / okwū

- (a) Ọ́jhi begins to talk
- (b) " has begun " "
- (c) " has spoken
- (d) " spoke.

(7) Ọ́jhi / ahnú / yā

- (a) Ọ́jhi has seen him
- (b) " saw him.

If sentences (6) and (7) were capable of all the given English renderings, then, there would be no need for the corresponding suffixes which express the various times / aspects represented in (a)-(d) for (6) and (a)-(b) for (7). For us, and I believe, for many dialects of Igbo, there are FOUR formally distinct representations of 6(a)-(d) thus:

- 65(a) Ọ́jhi ekwúwe okwū - (-WÁ Inchoative suffix.)
 And Ọ́jhi began to speak.
- (b) Ọ́jhi ekwúwele okwū (-WÁ + -lÁ Perf.)
 Ọ́jhi has begun to speak.

- 65(c) Ọ́jhi ekwúole okwū (-Ó + -lÁ Perf.)
 Ọ́jhi has spoken
 (d) ... Ọ́jhi ekwúo okwū (-O suffix)
 And Ọ́jhi spoke

Without these suffixes being overtly present in structure, it is not possible to express the above meanings in our dialect. This fact is responsible for some of Dr. Igwe's examples sounding un-Igbo in our ears. We have maintained that those Prefix and Suffixes described in 2.3.1 2.3.4 are inflectional and obligatory in our dialect, though they may be optional in Dr. Igwe's. In view of this important difference, the proposed analysis of Dr Igwe's is in-compatible with observed primary linguistic data from this dialect, and is consequently rejected on this ground.

The danger in the analysis of Igbo is to pin a label on formatives and lexical items and then go on to justify this tag. This approach has characterised the Green and Igwe approach in 1963, and now Dr Igwe's attitude in 1973. The vowel prefix called Aorist by him is not incompatible with other Time/Aspect suffixes in the Language; on the contrary, the Prefix and such suffixes must be present, at least in our dialect, in order for the appropriate time to be expressed. This is what is shown in 65(a)-(d) above as well as in the following 66:

- 66(a) Ya' kwushie ikhē, anyí acúo yā
 If he talks hard, we sack him.

If he makes a fuss, we sack him.

- (b) Ḿ kpola gī, gi āzakwani
 If I have called you, you do answer.

If I call you, do respond.

- (c) Ọ́ kpọrọ́ m, mu āza yā
 He called me (and) I answered him.

He called me, and I responded.

In these and similar examples, it would be begging the question to select the vowel prefix as the time/aspect meaning - expressing morpheme in

utter disregard of other relevant suffixes. We therefore suggest that it appears more appropriate to consider, for purposes of analysis, the vowel prefix A- along with any time/aspect suffix with which it may occur, and thus assign the resultant meaning, not to one item, but to the two or more of them combined.

It is also for this same reason that we think that no useful purpose is served by an analysis which seeks to break down the items enclosed in slanting brackets.

67(a) 0' ga { azū
 izū } anū
 He will buy some meat.

We believe in treating these items as a unit - a complex verb form in which there is a choice of prefix between A- and I- before the form enclosed in curly brackets, if, and only if the first element is ga. Although both 'igā' and 'inā' are auxiliaries of some sort, the first being used to express the future tense, and the second the Progressive/Habitual Aspect, the two verbs have different syntactic characteristics in the dialect under consideration.

67(b) 0' ga eri' yā eri: He will (certainly) eat it.
(c) 0' na eri' yā eri: He does/is actually eating it.

But whereas 67(b) can be transformed into 67(b(i)), 67(c) has no corresponding transform:

(b)(i) 0' ga yā nri: He will (certainly) eat it.
*(c)(i) 0' na yā nri.

We believe that Dr. Igwe's analysis of the vowel prefix A- as the Aorist prefix stems from his assumption that "no suffix of the language has to occur obligatorily in any construction type"

2.4.0 Construction Types

In this final section of the chapter, selected paradigms or examples are given to show the tone patterns required by certain clause types in the language. This is done to make subsequent references to them easy.

In some cases, the examples have been selected to reflect the differences rather than the similarities between the dialect being described here and that described by Green and Igwe (1963). Thus, we have not bothered to give examples of verb forms in the narrative division of the verb, since there are no dialect differences in this construction type. For the same reason, interrogative sentences have not been illustrated here.

The classification of verbs is as given in 2.3.1. It will be observed that members of class 3 verbs will behave tonally as either class 1 or 2 according to the construction type being considered. We start with the Affirmative division of the verb and then go on to the Negative division. Since we have given numerous examples of simple sentence constructions in the preceding sections, we restrict our examination here to three complex sentence constructions including

- | | | |
|-------|-------------|---------------|
| (i) | Conditional | Constructions |
| (ii) | Relative | " |
| (iii) | Purpose | " |

2.4.1. The Affirmative Division - Subordinate

As in the affirmative clauses, main, the morpheme constituent of verbs in subordinate clauses is cv stem + suffix. Only very few examples have been given of each subordinate clause, beginning with the conditional clauses.

(i) Conditional Clause A.

68(a) Ǫgú gá(a) ahyā, è ríe yā iwu.

If Ǫgú goes to market, one will fine him fine:

If Ǫgú goes to market, he will be fined.

(b) Éjìkhe raa ūbhe, afo ārawa yā ahu.

If Ejikhe eats pears, belly pain start to his body:

If Ejikhe eats pears, he develops stomach ache.

(c) Ūnu keé àla áhì, yá afùó ukà.

If you share land that, it will cause trouble:

If you share out that piece of land, trouble will ensue.

But Conditional Clause A can only express the open condition in which a future time meaning is implied in both the antecedent and consequent clauses. It is not equipped to express the improbable or unfulfilled conditional meaning, as in the following English examples:

If he were rich, he would donate generously.

If he had listened to warnings, nothing would have happened to him.

The fact that there are two types of conditional constructions, (Conditional clauses A & B) parallel with Relative Clauses A & B has not been pointed out before, and this has given rise to the wrong impression that Igbo has no construction equivalent to the above English examples. It is to handle such things as the improbable and unfulfilled conditional meanings that conditional clause B examples are given below.

From the following examples of conditional clause B, it will become obvious that conditional clauses in Igbo are instances of Noun Phrase sentential complements, although they differ from other Nà NP complements in the following respect: Generally, Nà NP complements express a proposition which makes some claim about its truth value, but in the case of these conditional Nà complements, such a claim has been cancelled by the very nature of the construction. Conditional clauses in Na NP complementation are explored further in chapter 5.

(ii) Conditional Clause B

69(a) Ya' wuru mà Ógù mere ñwé e, ó jògburu onwe yā
 If it be that Ogu did thing this it be bad kill self its:

If Ogu did such a thing, it is very bad.

(b) Ya' wuru ma I gwála yā, o gā mbya:
 you have told him, he will come.

(c) Ya' wuru mà ikpe m̄ara gi, kwuo īwu
 If case caught you, pay fine:

If you have been found guilty, you pay the fine.

69(d) Ya' wuru mà ókhe-òkpa ebéele, ci avòóla
 If cock has crowed, day has dawned:

If the cock has crowed, then it is daybreak.

70(a) A' si na` Ógu` anwúona, anyi ga(a)ra ama'
 If one said that Ogu has died, we would know

If Ogu had died, we would have known.

(b) A' si na` i' kwuru ézhi-okwū, o gāra ídī mma.
 If you told truth, it would be good:

If you had told the truth, it would have been fine.

(c) A' si na` unwu afula, madhū gara anwúshi
 If famine has come out people would have died.

If this were the season of famine, people would die.

(d) A' si na` o' duru ishi mkpu, muo gāra egbú yā
 If he swore false oath, spirit would kill him.

If he had taken a false oath, the gods would have killed him.

From these examples, it will be observed that after the expressions

Ya' wu ru mà and
 A' si na`

the following clause has a full range of tenses from the simple past to the perfect. All types of tense/aspect of the verb are possible with Conditional B, but not with A. This is the great limitation on Condition A clauses. In 5.2.0, it is shown that Condition A clauses are instances of Condition B types with the first part deleted. For our present purpose, it is enough to show that there is more than one type of conditional constructions in Igbo.

2.4.2 Relative Clauses A & B

(i) Relative A

In this subordinate clause, all verbs (classes 1-3) have their stem on a downstep in relation to the preceding noun/pronoun which invariably ends on a high tone: that is the Noun/Pronoun Subject of the Relative Clause.

71(a) Nde nwēre imī ākpoo la anwūrū.

Those who have nose have snuffed tobacco.

This is an idiomatic expression which means that "those who are aware of their talents make capital of them."

(b) Onye nwēre mādū nwēre àkhu.

Person who has people has wealth.

He who has human resources/connections has wealth.

It is in Relative clauses that another difference manifests itself between this dialect and that of Green and Igwe: In our dialect, Nouns of Tone classes 3&4 have rising glides; other nouns retain their lexical/inherent tone pattern:

71(c) Éle ñūrū mīri wū ñke ñá gbāgburu.

Deer which drank water is the one they shot.

The deer which drank water is what they shot.

(d) Àdha dí ivù wú onye m ñhwūrū.

Adha who is fat is person I saw.

It is the fat Adha that I saw.

(e) Ógú nwēre egō gā alú ādha m.

Ogu who has money will marry my daughter.

(f) Ñkata žūru oñī wū onye e jìdhere.

Nkata who stole is the person one caught.

Nkata who stole is the one they caught.

(g) Onye zāra amā ēmeene.

Who swept road has done. (vb. ízà cl.II)

Whoever swept the road has done well.

(h) Ndi niile dí n'otu nwēre ony.

Those all who are one have mouth.

All those who are united have bargaining power, or a say.

(ii) Relative B

In this clause type, verbs of Class 3 fall into the same group as those Class 2, they have their stem on a low tone, while Class 1 verbs behave as in Relative A, that is, in having their stem on a downstep. Apart from this difference, Noun subjects of Tone Class 3&4 have a final rising glide as in Relative A:

PARADIGM with Noun Subjects and Class 2 verbs

- 72(a) Ji' Ekwe kòrò dì áhwa.
The yams Ekwe planted are many.
- (b) Ji' Ulo kòrò dì áhwa. (íkò cl.2)
The yams Ulo planted are many.
- (c) Ji' Ug'o kòrò dì áhwa
The yams Ug'o planted are many.
- (d) Áhya anyi gára dì uthí (ig'ā cl.3)
The market we went to is far.

Paradigm with Class 1 verbs; and pronoun Subjects:

- 73(a) Ji' m rīrile dì áhwa
The yam I have eaten is much.
- (b) Òké I gbūrule dì áhwa.
The rats you have killed are many.
- (c) Ážū Ō gbūrule ēhile
Fishes he has caught have become many.
The fishes he has caught are many.
- (d) Ážū É gbūrule dì áhwa
The fishes one has caught are many.
The fishes which have been caught are many.
- (e) Ènwe ányi gbūrule dì áhwa:
The monkeys which we have caught are many.
- (f) Mgbadha { únu } gbūrule dì iŕé
 { únú }
The antelopes you have caught are five.

73(g) Āg'a ĥa' rĩrile dī asáã.

The ag'a yams they have eaten are seven in number.

2.4.3. Final/Purpose Clause.

The final/Purpose clause is treated extensively under NP complementation in chapter 9, it is introduced by the conjunction kà or mà. This clause type was treated by Green and Igwe as Subject Verb Form II, Subordinate Conditional, an analysis with which we totally disagree.

In this clause type, verb classes 1 and 3 fall into one group in that they have their stem on a high tone, while those of Class 2 have their stem on a low tone.

We have not considered it necessary to give whole paradigms, but a few illustrative examples:

74(a) Mè ñgwa ñgwa mà ányī gawakwani

Hurry up so that we may set out.

(b) Ráa ogwū ka áfō dī gī mma

Take medicine so that stomach may be to you good.

Take your medicine in order that your stomach may get better.

(c) Kpòthée yā mà ó zàá uìò.

Wake up him so that he may sweep house.

Wake him up so that he may do the sweeping of the house.

(d) Nñē lōrō áhya faa mà yá' shiere ānyī ĥwe

(My)mother returned market early so that she cook for us thing:

My mother returned in time from market in order to cook for us.

2.4.4 The Negative Division - Subordinate

As with the Negative of main clauses, the morpheme constituent of verbs in Negative subordinate clauses is

Prefix + verb stem + suffix

A + cv-stem + suffix.

The tonal behaviour of verbs is as given in 2.3.4.

77(b) Gí' ebē hii akhwa, kpo m̄ anu-ohyā.

If you do not cry, call me a fool.

(c) Yá aḥwūhii n'anya, ọ́ gáḥii ikwēni

If he does not see with his eyes he will not believe.

(d) Ányì agāwāhii n'og'è, ányì emée léèthi.

If we do not set out in time, we shall be late.

(e) Únu adūhii m̄ n'āzú, únú agbáfúóle.

Unless you follow me behind, you will get lost.

(f) Ĥá' akpàchāhii ánya, 'okwu oḥi ajóo njō

If they open clearly not eye matter that be bad:

Unless they take due precautions, the matter will get out of control.

Conditional Clause B

78(a) Á si nà a gwaḥii ya, ọ́ gáḥiiri ibyāni

If one said that one told not him, he would not come:

If he were not told, he would not come

had not been told, he would not have come

(b) Á si nà mīrī edōbèle, ítū ji agāhiiri ibīdho

If rain has not fallen plant yam would not start.

If it had not rained, the planting of yams would not have started.

(c) Á si nà m̄mehyè ádiḥii, m̄gbaghàrá agāhiiri idīni

If offence exist not, forgiveness would not exist:

If there were no offence, there would be no need for forgiveness.

(d) Ọ́ gáhiiri irī ḥwe ēhiḥè, ma ọ́ gáhiiri ọ́rú

He would not eat food of afternoon if he did not go to work

He would not have been given any lunch if he had not gone to the farm.

(e) Ọ́gu ágāhiiri ikwòta yá mà á si nà í gwàra yá

Ogu would not have picked him if you told him:

Ogu would not have picked him, if you had told him.

78(f) Ágaara ĩ́ ĩ́rĩ ya iwu mà a' siĩ ò nòhĩrĩ n'úlo ógwù

Would have they fined him fine if he were not in house of
medicine: They would have fined him, if he were not confined in
the hospital.

Observe that in both conditional clauses A & B, the conjunction mà is obligatory only if the consequent (clause) comes first in the construction. Note also that the verb of Condition B clauses is a complex one made up of the auxiliary gà (in its modal use) plus the suffixes

-ĩII and

-rV time

and the following verb form which begins in the harmonising open vowel prefix. From these examples given here, it will be observed that the form of the verb is fixed, it does not vary. This verb form, which is discussed further in chapter 5, constitutes a diagnostic differentiating test for unfulfilled conditional constructions or conditional clause B.

2.4.5 Relative Clauses A & B - Rel. A

In relative clauses, negative, there is an obligatory ná auxiliary element which is always on a high tone. Because of this high tone ná, the following open vowel prefix is on a downstep. For all classes of verbs, the stem is on a high tone; the negative suffix -ĩII is on a low tone if the verb is a class 2 verb, but on a downstep if the verb belongs to either class 1 or 3.

Examples with ĩ́rĩ (vb. cl. 1) and
ĩzà (vb. cl. 2)

79(a) Ónye na ērihĩi iĩrĩ tháà mere onwé yā

Person who did not eat food today did self his/her:
Whoever did not eat today cheated him/herself.

(b) Ngwu ná āzāhĩi ezhĩ zàra íme ulò

Ngwu who did not sweep the compound swept the house.

Paradigm with Noun Subjects:

- 80(a) Chúkwuēmeka na āzāhīī ezhí, erīhīī hwē.
 Chukwuemeka who did not sweep the compound did not eat
- (b) òké na āgbabhāfuhīī n'ónū kà nkitā cūwara
 Rat which could not run into its hole that dog chased.
 The rat which could not run into its hole was chased by the dog.
- (c) òkwa nā ātuhīī jí amāhīī n'onyā
 Bushfowl that did not peck at yam did not get trapped.
 The bushfowl which did not peck at the yams did not get caught in the trap.
- (d) Dkhē na ābyabèle na agbāgwòjú m̄ anyā!
 Dikhe who has not yet come is confusing me the eye
 That Dikhe has not yet come is confusing me.

Relative B

Relative B clauses are like Relative A in that the tone behaviour of verbs is the same in both clauses, and the nā element is also obligatory here. We give only one set of Paradigms with Pronouns as subject of the Relative clauses:

- 81(a) Ánu m na ēnyehīī Ekwe wēre ya iwe.
 Meat I did not give Ekwe angered him.
 The fact that I did not give Ekwe some meat angered him.
- (b) Ánu I na ēnyehīī Ekwe wēre ya iwe
 The meat which you did not give Ekwe angered him.
- (c) Ánu o na ēnyehīī Ekwe wēre ya iwe
- (d) " ányi " " " " " "
- (e) " únu " " " " " "
- (f) " h̄a " " " " " "
- (c) The fact that he did not give Ekwe some meat angered him.
- (d) " " " we " " " " " " "
- (e) " " " you " " " " " " "
- (f) " " " they " " " " " " "

In terms of Relative Clause constructions, this dialect differs from Ohuhu in having an obligatory Ná auxiliary element as part of its complex Negative verb form. This Ná element had hitherto been analysed as a lexical prefix. But Dr Igwe's recent view that it is the Ná auxiliary is in keeping with our analysis of it in this thesis.

2.4.6 Purpose/Final Clauses

This construction type hitherto analysed as the Affirmative Conditional Clause, Subject Verb Form II, by Green and Igwe (1963), is now analysed as Negative Purpose clause. Thus, not only has the descriptive label changed, but also it is treated here as negative rather than affirmative.

It might be argued, on formal grounds, that the above construction type illustrated in 82 & 83 is not negative, since the verbs of the purpose clauses do not contain any of the negative inflectional affixes of verb conjugation given in 2.3.1-2.3.3. But one has to consider the construction in its entirety, especially the tone pattern of verbs in the purpose clauses which definitely express a negative meaning. The uniqueness of the purpose clauses in these examples lies in the fact that the harmonising vowel prefix, if any, the verb stem and its suffixes are all on low tones regardless of the class of verbs involved. The inseparable, singular, second and third person pronoun subjects end on a falling glide, while nouns of tone classes 3 and 4 have their final low tone raised to high, as though in relative clauses. It seems to me that the term negative in Igbo verb conjugation must be widened to accommodate such facts as these which are structure-specific.

Examples 82 contain pronoun subject in the purpose clauses, while those of 83 contain noun subjects; all the classes of verbs are represented as shown.

With Pronouns as Subject of the Purpose Clauses

82(a)	Kpàchára	anyā	mu	èrichee	yá	(iri vb. cl.1)
	Open wide	eye	lest I	eat finish	it:	Be careful lest
			I should finish it all.			

82(b) Bìkhō, wèré nwayòò î dha. (ìdhà vb. cl.2)

Please take gentleness he should fall:

Please, be careful, lest you fall.

(c) Shìwé òsìiso ô gawa áhya lêthi (igā cl.3)

Go on cooking quickly he should go market late:

Hurry up with your cooking lest he should set out late to the market.

(d) Ógù kpásuru anyi iwe (khwòró) mà ányì ànuò

Ogu stirred up we anger intending that we drink not

mái yā. (íñū cl.1)

wine his: Ogu annoyed us {lest we should } drink his wine.
so that we might not

(e) Ógù tiwere mkpu unū àbha yá (ìbhà cl.2)

Ogu shouted shout {lest you } seize hold of him.
so that you might not

(f) Ngozi hēturu ma hí àhwu yá (íñwū cl.3)

Ngozi hid so that they might not see her.

With Nouns as Subject of the Purpose Clauses

83(a) Rútani ovú (khwòró mà) éghu ànwuò n'óbhu (ínwū cl.1)

Build you people, 'ovu'⁸ intending that goats might not die in tether:

You people, build an 'ovu' so that goats might not die off in tether.

(b) Unu mechiri úzò oké àbhata (ìbhàta cl.2)

You closed the door so that rats might not get in.

8 Òvu, in a traditional Igbo compound, is the building in front of the compound through which all visitors enter the compound. It is here that unfamiliar visitors or callers of questionable character are received. It also harbours domestic animals such as sheep and goats during the day. Because it is a large hall, these animals roam about in it without having to be tethered, provided that its gates are locked.

- 83(c) Gashíkwee ikhē Ūzō àgawa áhya (ígā cl.3)
Go fast do hard Ūzō set out not market:
Do, be very fast so that Uzo might not set out for market.

- (d) Kwudee ezhi-okwū Ala akugbuo gi (ikūgbu - compound verb)
Do speak the truth lest Ala should kill you.

The uniform tone pattern of verbs in these purpose clauses - all on low tones - does not always obtain if the verbs were compound verbs. As an illustration of what happens, consider the following examples.

84. Class 1 + 1 Compound Verbs

- (a) A sī m ya lāwá ǒ lɔgbuo ɔpara nnē m.

Told I her go home she not marry-kill eldest brother mine:

I told her to go hom lest she should marry my eldest brother to death.

- (b) Mechie onū i rigbuo onwe' gī

Close mouth you eat-kill self . your: Shut
up or else you die eating.

- (c) Pátuó māi { Ógū } àn'ugbuo onwé yā
 { Ñkata }

Remove the wine, or else (Ogu) should destroy himself drinking.

With compound verbs whose constituents are class 1 verbs, the same low tone pattern obtains in the purpose clause, both pronoun and noun subjects behave tonally as in 82 and 83. The same situation obtains if the compound verbs are of the following constituent members:

- | | |
|-------|---------------|
| (i) | Classes 1 + 3 |
| (ii) | " 2 + 1 |
| (iii) | " 2 + 3 |
| (iv) | " 3 + 1 |
| (v) | " 3 + 3 |

We give one example of each of the above compound verbs in a purpose clause:

- 85(a) Únú gágghàara yá khwòró sì ô ghaleere m okwu
 You went left behind him so that he examine not me the talk.
 You went without him lest he should examine the matter for me.

(1 + 3 compound verb)

- (b) Lìtè í dhagbuo nwá m (ídhàgbu, 2 + 1)
 Get up lest you crush my baby.
- (c) Ákwùola m ya ugwo ô zhigara dí yā ozhi (ízhiga 2 + 3)
 I have paid her the debt so that she might not send word to her husband.
- (d) Ógù furu ô byakhwo yá (íbyakhwu 3 + 1)
 Ogu left lest he should find him (in the house).
- (e) Ógbūru nwíè yá ilu ô shigara nnà yá ìrì
 (vb. íshiga 3 + 3)

He beat wife his beat lest she cook send food to her father.

He beat up his wife so that she might not cook food and send to her father.

But compound verbs of the following constituents:

- | | | | |
|-------|-------|----------|---------|
| (i) | 1 + 2 | (such as | ígbūdhà |
| (ii) | 2 + 2 | " " | ídhābhà |
| (iii) | 3 + 2 | " " | ímēfù |

have a different tone pattern in that

- (i) the singular pronoun subjects O and I are on a high-downstep glide;
- (ii) the first constituent of the compound verb is on the same pitch as the preceding high of the subject, or of the vowel prefix, if any, thus:

- 86(a) Ányì kpooro yá pòlìshi ô gbudhà ñkwu m
 We called him police lest he cut down oil palm mine.
 We called the police for him so that he might not cut down my palm tree.

CHAPTER 3 TONE

3.0. Introduction:

Tone occupies a central position in the syntax of Igbo. Consequently, whatever aspect of the language one decides to investigate, one cannot avoid some discussion of tone, hence the relevance of tone in the grammar of Noun Phrase (Sentential) Complementation which is the subject of this thesis. But in a more strict sense also, Tone is relevant to the subject of this thesis. The rule of relativization constitutes an essential distinction between factive and non-factive complements in Igbo, a topic which is illustrated in chapter 6. Since the tone rules which are given and discussed here apply to Igbo NPs of the structure $[N \neq N]_{NP}$ as well as to relative clauses some of which can be reduced to the above type of NPs, the discussion of tone is particularly relevant to our subject here.

However, it has to be observed from the start that Tone is a full subject of its own even beyond the scope of any one Ph.D. thesis. Unfortunately, not very much has been done in this as in other areas of Igbo syntax, and this chapter does not represent what is lacking in the study of Tone, but what we consider relevant to NP complementation in Igbo.

We have decided on an early treatment of tone for the simple reason that at every turn in the grammatical analysis of Igbo, the analyst is confronted with the issue of tone: of how far grammatical relations are signalled by means of tone, or how one underlying item can manifest different tone patterns according to the various syntactic structures in which it may be functioning. Some of these polysystemic tone patterns have been given in the examples of the various construction types given in the preceding chapter 2, but the generation of such patterns by means of tone rules is illustrated in the following sections so that subsequent references can be made to them (that is, to the tone patterns and the rules that generate them).

In the description of tone in a tone language, one should in principle recognise two levels of analysis:

- (i) Tone changes due to syntactic relation,
- (ii) Tone changes due to the juxtaposition of certain tones.

But in practice, it is not easy to maintain this demarcation, since one level dove-tails into the other. In syntax, grammatical relations between units of structure are manifested by word order and/or by tone, and tone changes are realised at the surface in terms of high-tone lowering (downstep) or low-tone raising. Yet these syntactically determined tone changes must be related to the phenomenon of Downdrift¹ common in West African languages, and downdrift is not syntactic, but purely phonetic. Thus, although the motivation of some tone changes in Igbo is syntactic, the surface realisation of such tones is by a series of phonological rules which will be discussed and illustrated in 3.2.0. As will be seen in this section, we have not got two sets of phonological rules - one set for syntactically determined tone changes and the other for phonologically determined ones. Rather, what we have is a set of rules which work together to produce the tone patterns that we associate with Igbo sentences, and in most cases, the application of one tone rule creates an output structure which becomes the input to the next rule. In this way they are not isolated, but interdependent, the result is that our distinction between syntactically determined and phonologically motivated tone rules does not obtain in practice.

In handling this chapter, we have drawn most of the phonological rules from existing research on tone within the frame work of Generative phonology, especially from Ibadan Notes.² The aim of such research has been to arrive at a uniform treatment of two phenomena in most tone languages which must

1 See 3.2.0 for definition

2 TONE in Generative Phonology, RESEARCH NOTES, Vol. 3, parts 2 & 3, Dept. of Linguistics and Nigerian Languages, University of Ibadan, 1971.

be considered distinct in origin: Downdrift and Downstep. We could have merely referred the reader to this research without repeating the rules here. But we consider such a method inadequate, especially as we have added to the number of these rules in a way which alters their (intrinsic) ordering, and we have consequently extended their application to other NP structures in the language. Such additions and the extension consequent on them call for the citing of the rules without which a discussion of them and the justification of the extension could not be meaningfully carried out.

3.1. UNDERLYING PHONOLOGICAL REPRESENTATION

Tone in Generative Phonology has merely begun to receive the attention of researchers in African Languages. One of the problems facing such Africanists is the representation of tone in the underlying phonological form of verbs. We single out verbs as the source of problem here because with other lexical categories, such as Nominals, it is always possible to relate surface or phonetic tone patterns systematically to the underlying or inherent tone patterns by means of the tone rules. But with verbs, the situation is made difficult by the fact that the same verb which may be classed as high (Class 1) or low (Class 2) or high-low (Class 3) will manifest different tone (patterns) in different sentence or construction types. Take Relative Clauses, for example. As we observed in 2.4.8., all the three classes of verbs given above have their stem on downstep (high) tone with regard to what precedes. This means that even an inherently low tone verb of class 2 behaves like a high tone one in this clause type. As far as we know, there is no way of deriving a high tone verb from an underlying low one short of tinkering. To avoid this unpleasant method, we have adopted the following method:

- (i) the underlying phonological form of a verb is determined by the sentence type in which it is functioning, hence in Relative A clauses, the three tone classes of verbs are all high;

- (ii) With regard to Nominals, underlying phonological form means the inherent or lexical tone pattern;
- (iii) Where an affix (a prefix or suffix) has a tone independent of its tonemic context, such a tone is generally specified in underlying phonological form. So far, only three suffixes - the perfect negative and affirmative suffixes, -bèle and -lÁ' ~ nÁ', and the vowel suffix -O' are known to have inherent tones unaffected by context.
- (iv) Although nominals have been classified here according to their tone classes, the tone class of a particular noun is not sufficient to guarantee its appropriate phonetic pattern, we need to make reference to the type of syntactic structure involved; to this effect the adjacent tones at word boundary and the use of labelled bracketings give the necessary and sufficient information. For example, the following labelled bracketing $\left[\begin{smallmatrix} \text{NP} & \text{S} \\ & \text{Rel.} \end{smallmatrix} \right]$ is sufficient to trigger the generation of rising glides (V) on nouns or other items with final low tone in an NP subject of a relative clause, as in (a) & (b) below:

(a) Ógũ gāra ahyā Ogu who went to market.

(b) Éghu ǒ rīri jī m This goat that ate my yam

where Ógũ and the determiner ǒ have an extra high tone which now precedes the downstep on the stem of the verb of the relative clause.

Similarly, the use of the labelled bracketing

- (a) $\left[\begin{smallmatrix} N_1 & \neq & N_2 \end{smallmatrix} \right]_{\text{NP}}$ or (b) $\left[\begin{smallmatrix} N & \text{Det} \end{smallmatrix} \right]_{\text{NP}}$ is enough information to the effect that the final low tone of N_1 in (a) or N in (b) does not develop into a rising glide as in relative clauses, unless N_2 is a monosyllable, but is only raised to a high tone provided N_2 or Det begins in a low tone thus:

(a) ǒdhù ≠ òké → ǒdhū òke 'rat's tail'

(b) ǔlò ≠ ọ → ǔlō ọ this house

(c) ódhù ≠ jí → ódhỹ jī tail of a yam

3.2 Syntactically determined Tone changes and Downdrift

Downdrift is a phenomenon occurring in many tone languages with primarily level (as opposed to contour) tones; it also occurs in languages with glides which are analysable as a sequence of level tones. It has received a fairly wide treatment³ by scholars interested in tone languages. Downdrift may be defined as the progressive lowering of pitch throughout a phrase due to intervening low tones. For example, in a sequence of all high or low tones, the pitch remains the same, but in a sequence of high-low-high or low-high-low, the second high or low is on a lower pitch than the preceding high or low tone. It is thus possible for a high tone late in a phrase to have a lower absolute pitch than a low tone early in the phrase.

The above hypothesis is experimentally verifiable, as the following mingograms/show. Compact, vertical lines (striations) represent pitch tracings: the longer they are, the lower the pitch of utterance, the shorter, the higher the pitch. In other words, pitch is inversely proportional to the length of triations.

The following sentences have been used:

- 1(a) ... Àdhá āh̃w̃y ākhwa dī kà akhwá ekē
 And Adha saw some eggs like the eggs of a python.
- (b) Ótū m̃gb̃e, ótū nwá̃anyī pyé̃re phya akhū
 One time, one woman went into bush of kernels:
 Once upon a time, a woman went into the bush in search of kernels.
- (c) Nnē dēchere ùri gáwa ahyā!
 Mother, mine, who beautified herself with indigo and set out for market.

-
3. Welmers, W. (1959): "Tonemics, morphotonemics and Tonal morpheme" General Linguistics 4 p. 1-9.
 Winston, F.D.D(1960): "The Mid tone in Efic" African Lg. Studies 1, p.188-192.
 Schachter, P.(1961): "Phonetic Similarity in Phonemic analysis" Language 37:2 p.231-238.
 Arnott, D.W.(1964): "Downstep in Tiv verbal system" African Lg. Studies 5, p. 34-51.

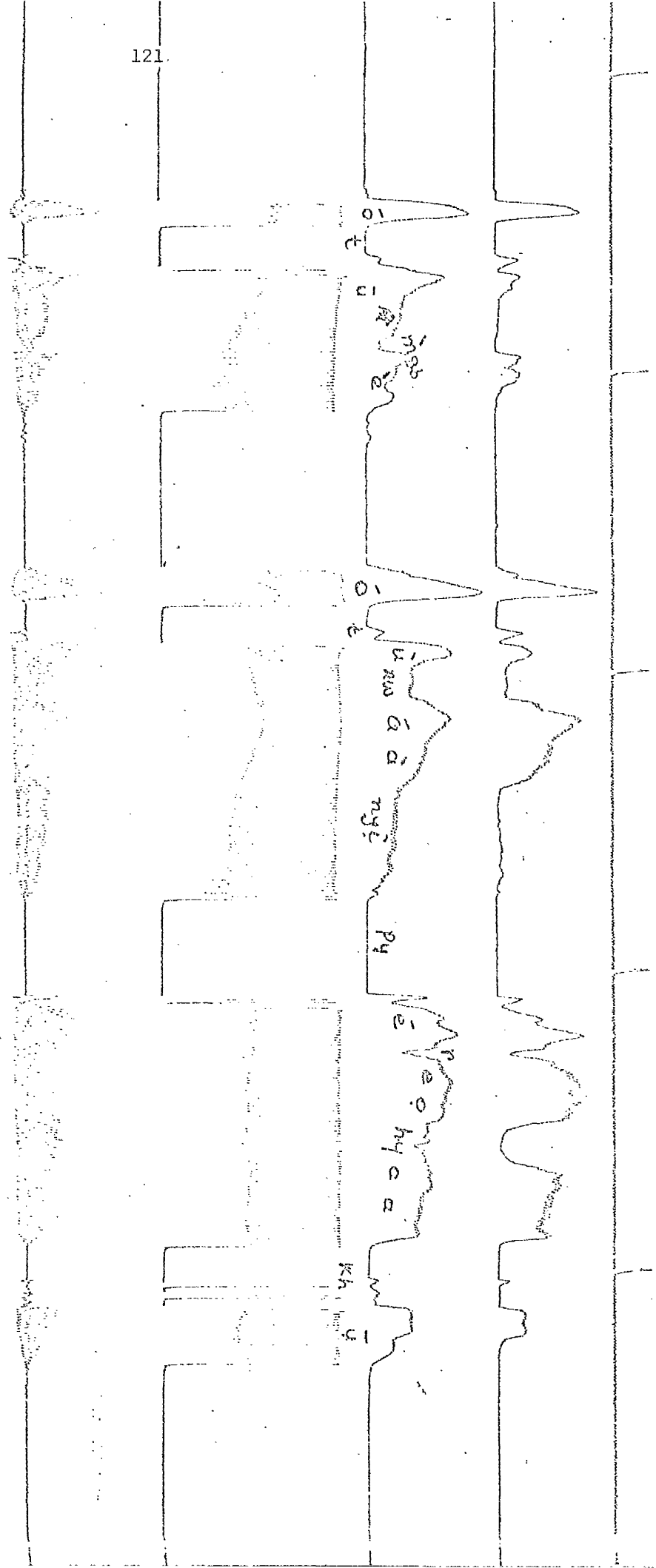
ādhā āhwa khwa

dī k ā khwā e k ē

khwa d k khwa k

ādhā āhwa ākhwa dī k ā khwā e k ē

ó kú n'gbé, ó kú n'wá à n'í p'g'wé ó kú a akh'í



N' mē dēchere ūri gāwā ahyā

N' mē dēchere ūri gāwā ahyā

ya^h à' na ò gbà

ghò' r ò ù h e

gwe' e ya

ma a ya

ya' abhà' na ò gbà, ghò' r ò ù h e, gwe' e ya, ma a ya

1(d) ... Ya' abhāa' n'ogbā, ghōrō ùri, gwée yā maa yā

And he entered the garden, plucked indigo, ground it rubbed it:

And he entered the garden, plucked an indigo fruit, ground and rubbed it.

In the first mingogram (p.120), apart from the observable general lowering of pitch, it will be seen that the initial low tone of the phrase on Àdhā has much shorter striations than the downstep on dī in the middle of the phrase, to say nothing about the much longer striations on the final high tone of the entire phrase, itself a downstep. Correspondingly, the pitches of these same syllables are roughly 130 Hz for the initial low tone, 110 Hz for the downstep high on dī in the middle of the phrase and 90 Hz for the final high tone (downstep) at the very end of the phrase. The difference between the initial low and the final high is very remarkable.

In the second mingogram (p.121), we are interested only in the expression - Ótù nwaānyị pyére ɸhya akhū which constitutes a semantic unit. The first low tone of this phrase is on the second syllable of ótù, while the last syllable of the phrase is on a downstep high. A look at their respective striations indicates that the first low tone is on a higher pitch than the final high tone at the end of the phrase. While this initial low is on a pitch of about 100 Hz, that of the final high is on a pitch of 85-90 Hz. The downstep relationship between the preceding high-tone syllables and the final downstep in the last bit of the sentence,

..... pyére ɸhya akhū

is also interesting. These are in the relation of 100 Hz to approximately 90 Hz. This same downdrifting effect is obvious from the third mingogram (p.122) where the first three syllables terrace down as shown from a pitch of about 140 Hz to about 110 Hz on the second downstep:

N'	nē	dēchere
140 Hz	120 Hz	110 Hz

Because of the intervening low-tones on uri, the final high-tones on gáwa ahyā are both lower than the preceding ones, and are in the pitch relation of 90 Hz to 80 Hz on the final downstep.

But this lowering affects low-tones as much as it does high ones. For example, in the fourth mingogram (A123), the first low tone of the entire sentence on -bhà has a pitch of roughly 100 Hz, the subsequent ones after two intervening highs are on a lower pitch of about 80 Hz, while the next set of lows on uri are lower still, having an average pitch of 70 Hz.

What these results show is that the terrace level⁴ tone pattern associated with tone languages is both real and verifiable experimentally. The range of the downward terracing may vary from sentence to sentence, or even according to the length of sentences, but the progressive lowering of pitch from the beginning to the end of a phrase does take place. However, what is observable from the pitch measurements given here and what must be emphasised is that, although pitch drifts downwards, the relative contrast between high and low is preserved throughout a phrase.

Downstep

In addition to downdrift, Igbo, like many other tone languages, also has the phenomenon of downstep or lowered high-tone. Downstep in Igbo is always an indicator of some syntactic relationship, such as the relation of constituency between two items in an NP, or a verb-object relation. Whatever syntactic relationship it marks, the downstep in Igbo is always preceded by a high-tone, and never otherwise. It is thus to be distinguished from the mid tone in, say, Yoruba, which can occur

4 The term, terrace-level, is due to Pike (1948) Tone Languages, University of Michigan Press, Ann Arbor.

independent of a high tone. In the following 2(a-b) which have been described as Genitive structure by Green and Igwe (1963) or Completive phrase by Voorhoeve, Meeuseen and de Blois (1969), the pitch relationship among the syllables is given as follows:

2(a)	íshi	#	éghu	→	íshi	eghū
	head		goat		1 1	1 2
					The head of a goat	
(b)	íshi	#	òké	→	íshi	òke
					1 1	2 2
					The head of a rat	

The phonetic scale values 1, 2 n indicate pitch, the smallest number representing the highest pitch.

Despite their distinct origins, downstep being a marker of syntactic relation, while downdrift is a mere phonological feature, the two phenomena can be uniformly treated, if we accept the basic hypothesis that pitch lowering in a sequence of tones is due to intervening low pitches. It is very likely that all downsteps can be diachronically derived from tonal systems with two underlying tones: high and low, although this is not always tenable in synchronic data. However, it has been shown (Fromkin, 1972 and Arnott 1964) that some downsteps do, in fact, derive from an underlying high-low-high sequence thus:

3.	me'	òbó	'my stone'.
	H	L H	
	1	3 1	underlying pitches
	1	3 2	pitches after the application of downdrift rules
	1	Ø 2	pitches after the deletion of /ɔ/ by vowel deletion rule.
	me'	bō	
	1	2	final phonetic form.

In addition to the above example given by Fromkin from Akan - a language of Ghana - Arnott (1964) has also demonstrated that in Tiv

verbal system, a surface downstep derives from the same high-low-high sequence. In Igbo, on the other hand, there is even a stronger case for postulating such a non-segmental low tone in underlying phonological form. First, there are ample data to show that in addition to deletion, there is sometimes an incorporation of this non-segmental tone in specific structure types, for example, relative structures:

- 4(a) Ógū̃ gāra ahyā ālola
 (b) Ógū̃ " ahyā "

Ogu who went to market is back.

4(a) & (b) are dialect variants of the same structure whose underlying subject NP is Ógū̃. In order to account for Ógū̃ with its rising glide, or Ógū̃ with its downstep high, one must assume the presence in underlying phonological form of a non-segmental low tone which (after the necessary phonological rules have applied to raise it) must have been incorporated in the one case but deleted in the other. The relevant rules are discussed in 3.5. All that these facts call for is the provision for a rule of Tone Incorporation in addition to one of Tone Deletion (Tone Simplification in this thesis) in the phonological description of Igbo. We therefore disagree with Kiparsky's argument (Kiparsky 1968) that these underlying non-segmental low tones never appear at the surface. They do appear in surface or phonetic form in Igbo, given specific contexts, and this is why we have added a rule of Tone incorporation to the tone rules which we have taken from Ibadan Research Notes. We do, however, agree with him that downstep must be given a phonemic status, at least in some dialects of a language. Williamson (1972) has shown that downstep in the Onitsha dialect of Igbo is distinctive, but this does not destroy the case for an underlying non-segmental low tone which triggers downsteps in the same way that segmental low tones intervening between high or low tones bring about downdrift.

3.3 Tone Rules

The following are the phonological rules necessary for the generation of Igbo downstep and downdrift tone pattern generally. They are first given here, then discussed later and subsequently illustrated with a wide range of data showing different construction types in the language, and thus demonstrating that the tone rules have a far more general application than had hitherto been realised.

Tone Rule (Tn-Rule) 1

1(a)	(High tone)	→	$\begin{bmatrix} +S \\ +R \end{bmatrix}$
1(b)	(Low tone)	→	$\begin{bmatrix} +S \\ -S \end{bmatrix}$

What Tn-Rules 1(a) and (b) do is provide a mechanism for decomposing the underlying tones of terminal strings into distinctive (and non-distinctive) phonological features which now become the input to subsequent phonological rules. In addition to being segmental, $[+S]$, high and low tones are distinct in being either raised $[+R]$, or unraised $[-R]$. The use of $[+R]$ and $[-R]$, as opposed to Carrell's⁵ $[+h]$ and $[-h]$ avoids a possible confusion with 'high' and 'low' as features of tongue height. Moreover, it enables one to speak in relative terms.

Similarly, $[+S]$, a segmental tone or one belonging to a syllable in underlying phonological form is here distinguished from the hypothetical non-segmental low tone $\begin{bmatrix} -S \\ -R \end{bmatrix}$ introduced in underlying form to trigger downstep and downdrift generally.

5 Carrell (1970) op.cit. Chapter 5 p.84.

Tn-Rule 2

$$X \not\Rightarrow Y \Rightarrow X \begin{bmatrix} -S \\ -R \end{bmatrix} Y$$

Where X and Y, already in phonological form, could be any of the following:

- (i) N1 ≠ N2 NP or N Det NP.
- (ii) NP - Verb
- (iii) Verb - NP

As the double arrows show, Tn-Rule 2 is transformational; it introduces the hypothetical non-segmental low tone in underlying phonological structure between the two items whose tone pattern is being generated. This rule provides the input to subsequent Tone rules and is in keeping with the theory that downstep and downdrift are tone lowerings⁶ due to intervening low tones.

Tn-Rule 3Metathesis Rule

(Transformational)

$$\begin{matrix} \begin{bmatrix} -S \\ -R \end{bmatrix} & \begin{bmatrix} +S \\ +R \end{bmatrix} & \begin{bmatrix} +S \end{bmatrix} \\ 1 & 2 & 3 \end{matrix} \Rightarrow 213$$

This rule merely moves round the non-segmental low tone into such a position that it immediately precedes the second syllable of the following nominal.

Tn-Rule 4Tone-Raising Rule

$$\begin{bmatrix} -R \end{bmatrix} \longrightarrow \begin{bmatrix} +R \end{bmatrix} / \neq \begin{bmatrix} -R \end{bmatrix} \text{ — } \neq \begin{bmatrix} -R \end{bmatrix}$$

This rule enables one to capture the phenomenon whereby a low-tone preceded and followed by low-tones in a nominal phrase (NP) is raised to a high-tone. This is also what happens when two basically low-tone

6 Kay Williamson 1971 "The generative treatment of downstep"

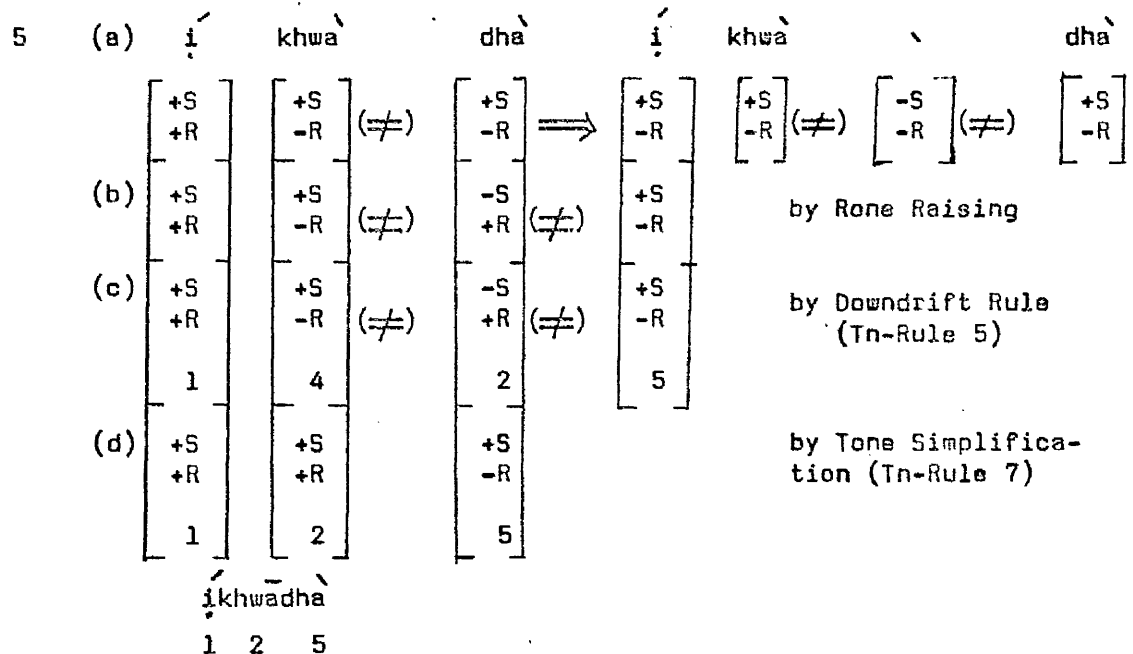
Ibadan Research Notes, 3, parts 2 & 3 p.23.33.

For an earlier view of the nature of the underlying non-segmental tone, see Voorhoeve, Meeussen and de Blois (1969).

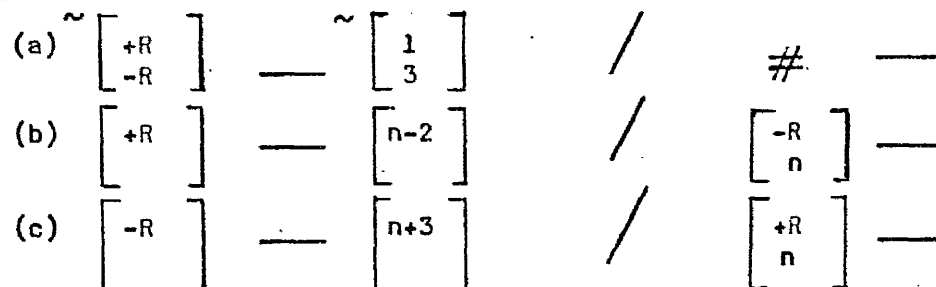
verbs combine to form a compound verb, as in the following example:

ikhwa' 'to push' and idha' 'to fall' →
ikhwādhā' 'to push down'

The tone pattern of the above compound verb can be generated in the following way:



Tn-Rule 5 - Downdrift Rules



where n = pitch value

and \sim = a notational convention showing that the square brackets are not enclosing feature specifications as they do in phonology, but are indicating that $\begin{bmatrix} +R \end{bmatrix}$ is always re-written as 1 etc, as square brackets do in syntactic rules.

Tn-Rule 5 (a) assigns the numerical values 1 or 3 to the initial high or low-tone of a phrase. Observe that the lowest number represents

the highest pitch. With the application of 5(a) as basis, one can generate the relative pitches of subsequent syllables by iteratively applying 5(b) & (c). The rule works in a left-to-right direction.

Tn-Rule 6 - Tone Incorporation

This rule has not been formalised here, but we are clear as to what it does. It is responsible for the development of glides in

- (a) Monosyllabic nouns of Tone class 1 (a) in first or pre-genitival position. With this class of nominals Tone Incorporation must be ordered after Tone Assimilation (Tn-Rule 8), as otherwise, one gets a sequence of high-low-high, which is not acceptable, as in $Ji\acute{i}$ Chi' , instead of the desired $Ji\bar{i}$ Chi (Chi's yam);
- (b) Nouns of Tone classes 3 and 4 when they are NP subject of designated clauses (ie Relative - Temporal, N'ébe Causal, and Manner Adverbial NP Clauses)

Tn-Rule 7 - TONE SIMPLIFICATION RULE

$$\begin{bmatrix} +S \\ R \\ \alpha \end{bmatrix}, \quad \begin{bmatrix} -S \\ R \\ \beta \end{bmatrix} \longrightarrow \begin{bmatrix} +S \\ +R \end{bmatrix}$$

(where α or β is +).

This rule provides for the deletion of non-segmental tones at the end of the phonological rules. Since the Tone Incorporation Rule is ordered before this rule, there is no more need to block its application to Monosyllables of Tone Class 1(a) nor to nouns of Tone classes 3 and 4.

Tn-Rule 8 TONE ASSIMILATION

$$\begin{bmatrix} -R \\ n \end{bmatrix} \longrightarrow \begin{bmatrix} +R \\ n-2 \end{bmatrix} / \begin{bmatrix} +R \end{bmatrix} \neq \begin{bmatrix} +R \\ n-2 \end{bmatrix}$$

This rule provides for the assimilation of the initial low tone of Nouns of Tone class 2 whenever this low tone is preceded by a high tone across word boundary, as in

$$\neq N'ébe \quad \neq \quad \acute{o}ké \quad \neq \quad nw\acute{u}r\acute{u}na \longrightarrow N'ébe \acute{o}ké nw\bar{u}r\bar{u}na$$

Since the rat has died.

6. 0'gburu ≠ òké' → 0 gbūru oke

He killed a rat.

Tn-Rule 9 - TONE REDUCTION RULE

$$\neq \begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} -S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix} \Rightarrow \begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix} \neq$$

This deletion rule is made necessary⁷ as a result of the application of the foregoing Tone rules to nominal structures in which Tone Class 5(b) Nouns (such as Ibe) are in genitival or second position. It will be recalled that this class of nouns are either proper names or personifications and have a different tonal behaviour in this position from their counterparts in Tone class 3.

Other necessary modifications to these Tone rules will be pointed out and discussed when each of them is applied to some data from our dialect. There is no doubt that, in order to generate all the permissible tone patterns in Igbo nominal structures, these rules will have to be extended, and some intrinsic ordering on their application stated where necessary.

Before applying these rules to Igbo structures, a brief discussion of them is appropriate here.

It will be recalled that the Tone rules given here are mainly Base Rules, only a small number of them are transformational. This is the main difference between this and Carrell's handling of Tone. We agree with her that only two tones - high and low - need be set up in underlying phonological structure, and that downstep is a surface or phonetic

7 Apparently, the Ibadan workshop (see Research Notes p.83-90) did not examine proper names such as Ibe when it is in second position as in

Ishi Ibe Ibe's head
Ala' Ibe " land.

In order to derive tone patterns such as these, one has to provide for the deletion of the first of a sequence of $\begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix}$,

which is a high tone. The rule is admittedly adhoc, and so is the tone pattern it is trying to characterise idiosyncratic. For the application of this rule, see 3.5.

phenomenon for Igbo, even though it has its origin deep in syntax.

Carrell's use of distinctive features such as $\begin{bmatrix} +h \\ -e \end{bmatrix}$ for high tones, and $\begin{bmatrix} -h \\ -e \end{bmatrix}$ for low tones is in keeping with our own use of $\begin{bmatrix} +S \\ +R \end{bmatrix}$ for the same high and low tones, though we prefer $\begin{bmatrix} +R \end{bmatrix}$ since this not only avoids a possible confusion of $\begin{bmatrix} +h \end{bmatrix}$ with features of tongue height, but also enables one to speak in relative terms. But we differ from her in this sense that the above features echo $\begin{bmatrix} +e \end{bmatrix}$ need not be introduced at all, let alone by a series of 8 transformational rules. We regard tone as a bundle of phonological features whose distinctive and redundant features are inherent and are, therefore, better captured by re-write rules such we have given in Tn-Rules 1(a) & (b). For similar reasons, we have also assumed that all boundary symbols employed here are generated in Base rules. These symbols include:

#	for Phrase (Sentence) boundary
≠	" Word (Morpheme) "
+	" Formative boundary.

(Formatives include prefixes and suffixes). These boundary symbols are better introduced in the Phrase Structures by Base-Rules, and this method is much more economical than Carrell's Transformational approach.

In order to generate downstep and downdrift tone pattern generally, she employs 7 cyclical and 4 post-binary rules. This same effect can be more economically achieved by means of the Downdrift rules given here. Once the numerical value of the first tone has been determined by Tn-Rule 5(a), then subsequent pitches can be determined by repeated application of 5(b) or (c) following a linear Left-to-Right direction.

Very early in this chapter (see 3.0) we called for a distinction between syntactically motivated tone changes and other tone changes which are purely phonological. In practical terms, the only distinction one can make lies in the ordering of the rules given here. For example, the

Tn-Rule 2 which introduces the non-segmental low tone is the first step towards the generation of downstep, or downdrift. Let us take a simple example to illustrate the process:

8(a) ^íishi ~~≠~~ ^éghu (the head of a goat).

⇒ 8(b)

8(b) $\begin{bmatrix} \text{I} \\ +S \\ +R \end{bmatrix}_{\text{NP}} \begin{bmatrix} \text{shi} \\ +S \\ +R \end{bmatrix} \neq \begin{bmatrix} \text{e} \\ +S \\ +R \end{bmatrix} \begin{bmatrix} \text{ghu} \\ +S \\ +R \end{bmatrix}_{\text{NP}}$ by Tn-Rule 1(a)

8(c) $\begin{bmatrix} +S \\ +R \end{bmatrix}_{\text{NP}} \begin{bmatrix} +S \\ +R \end{bmatrix} \neq \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix}_{\text{NP}}$ by Tn-Rule 2.

These two rules therefore provide the phonological structure for the application of Downdrift rules. (Tn-Rule 5(a) (b) & (c)).

8(c) therefore represents only a stage in the whole process of deriving a downstep; it is not the downstep itself. Only the application of Downdrift and other necessary rules will yield the surface downstep thus:

8(d) $\begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix} \neq \begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} -S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix}$ by Metathesis
(Tn-Rule 3)

8(e)

^í	^{shi}		^e	^{ghu}
+S	+S		+R	-S
+R	+R		+S	-R
1	1		1	
1	1		1	4
1	1		1	4
1	1		1	2
1	1		1	2

 By Downdrift Rule (Tn-Rule 5(a))
by Tn-Rule 5(c)
" " 5(b)
8(f) by Tone Simplification
(Tn-Rule 7)

8(f) ^íishi ^éghu $\begin{bmatrix} - & - & - & - \end{bmatrix}$
 1 1 1 2

It is necessary to point out that the numerical values are relative; the value 2 does not always stand for a downstep, but in relation to a preceding high tone, in this case 1, it is a lowered high tone, or drop tone or downstep.

From this and other subsequent examples, it will be seen that Downdrift is a late phonetic rule which converts phonological binary features to

phonetic scale features. There is no one rule which could be described as the Downstep rule. All that Tn-Rule 2 does is provide the necessary structure for the operation of subsequent tone rules. At this level, therefore, syntax and phonology are not distinct for the simple reason that any phonetic tone pattern, be its origin syntactic or phonological, must be the product of some of the foregoing rules, which are essentially phonological. At this level in the description of Igbo, syntax and phonology merge.

Order of the Tone Rules

The numbering of these rules does not necessarily reflect any extrinsic ordering; it is more for ease of reference, and must be seen as such. Any strict ordering of rules in Igbo grammar must wait for more facts from a thorough study of various aspects of the language. It must be observed that evidence from the grammar of complementation presented in part II of this thesis (cf 51.0:268ff) is in favour of intrinsic ordering, although the rules of syntax and phonology are different in kind. However, where an ordering relationship between two phonological rules has been considered necessary, as in the generation of the tone pattern of class 1(b) nominals (that is mono-syllabic nouns in first or pre-genitival position) such an order has been given. In this regard, in order to ensure the derivation of the well-formed 9(a) or block the generation of the deviant 9(b) from the underlying form 9(c), we must maintain the following ordering relationship:

Either	Tone Incorporation	(Tn-rule 6)
Or	" Simplification	(Tn-rule 7)
If 6, then	" Assimilation	(Tn-rule 8)
9 (a)	Jii Ci	Ci's yam
(b)	* Jii Ci	

$$\begin{array}{c}
 9 \text{ (c)} \quad \begin{array}{c} \text{Ji}' \\ \left[\begin{array}{c} +S \\ +R \\ 1 \\ 1 \end{array} \right] \end{array} \neq \begin{array}{c} \left[\begin{array}{c} -S \\ -R \\ 4 \\ \emptyset \end{array} \right] \end{array} \neq \begin{array}{c} \text{Ci}' \\ \left[\begin{array}{c} +S \\ +R \\ 2 \\ 2 \end{array} \right] \begin{array}{l} \text{(By Tn-rules 5(a-c))} \\ \text{(By Tn-rule 7)} \end{array} \end{array} \longrightarrow 9 \text{ (d)}
 \end{array}$$

$$\begin{array}{c}
 \text{(d)} \quad \begin{array}{c} \text{Ji}' \\ 1 \end{array} \quad \begin{array}{c} \text{Ci}' \\ 2 \end{array} : \text{Ci's yam}
 \end{array}$$

To derive 9 (a) from 9 (c), we apply the alternative rules thus

$$\begin{array}{c}
 \begin{array}{c} \text{Ji}' \\ \left[\begin{array}{c} +S \\ +R \\ 1 \end{array} \right] \end{array} \neq \begin{array}{c} \left[\begin{array}{c} -S \\ -R \\ 4 \end{array} \right] \end{array} \neq \begin{array}{c} \text{Ci}' \\ \left[\begin{array}{c} +S \\ +R \\ 2 \end{array} \right] \text{ (By Tn-rules 5)}
 \end{array}$$

$$\longrightarrow \begin{array}{c} \text{Ji}' \\ \left[\begin{array}{c} +S \\ +R \\ 1 \end{array} \right] \end{array} \begin{array}{c} \left[\begin{array}{c} -S \\ -R \\ 4 \end{array} \right] \end{array} \neq \begin{array}{c} \text{Ci}' \\ \left[\begin{array}{c} +S \\ +R \\ 2 \end{array} \right] \text{ (By Tone Incorporation, Tn-rule 6)}$$

$$\begin{array}{c} 1 \quad 2 \quad 2 \end{array} \text{ (" " Assimilation, Tn-rule 8)}$$

$$\longrightarrow 9 \text{ (a)} \quad \begin{array}{c} \text{Jii}' \\ 1 \ 2 \end{array} \quad \begin{array}{c} \text{Ci}' \\ 2 \end{array}$$

Thus, Tone Assimilation is contingent on a prior application of Tone Incorporation with classes 1 (b), 3 & 4 nominals. Failure to apply rule 8 after the application of 6 is responsible for the deviance of 9(b).

3.4 TONE CLASSES

For the operation of the Phonological rules so far given, Igbo nominals (nouns) have been classified as follows:

TONE CLASS 1 (a)

This Tone class includes all nouns with tonal structure high-high, except proper names or Personified nouns.

Tone Class 1 thus includes

$$\begin{array}{c}
 \begin{array}{c} \text{e}' \quad \text{ghu} \quad \text{goat} \\ \left[\begin{array}{c} +S \\ +R \end{array} \right] \left[\begin{array}{c} +S \\ +R \end{array} \right] \\ \text{i}' \quad \text{shi} \quad \text{head} \\ \left[\begin{array}{c} +S \\ +R \end{array} \right] \left[\begin{array}{c} +S \\ +R \end{array} \right]
 \end{array}
 \end{array}$$

These nouns will always have a downstep final syllable when they are in second or Genitival position thus:

íshi ~~≠~~ éghu → íshi eghū

But they will behave differently if they are personified or used as proper names, thus:

10 (a) Nwá' ~~≠~~ Éghu → Nwá' Ēghu
the son of Eghu

(b) Nwá' ~~≠~~ Ánya → Nwá' Ānya
Anyá's son

Contrast nwá' eghū (a small goat) with
nwá' Ēghu (the son of Eghu)

This contrastive pattern is enough reason for treating proper names and personifications as a separate group.

TONE CLASS 1(b) - This group comprises monosyllabic high tone nouns in the language. It is these nouns which in first or pregenitival position have the following possibilities, (cf. p.138)

11 (a) Jí' Cī or : Cí's yam

(b) Jíí' Cí

TONE CLASS 1(c) - This is a covert class found in such nouns as Ágū or in certain prepositional phrases such as - Ná' ɔnū : in the mouth
" imē : inside

TONE CLASS 2 NOUNS - This class includes all nouns with a low-high tone pattern as in:

0' ké (rat)

$$\begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix}$$

TONE CLASS 3 - To this class belong all high-low tone nouns such nouns as:

0' dhū (tail)

$$\begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix}$$

except proper names which, like those of Tone Class 1(a), behave idiosyncratically. The contrast between the following pair will illustrate the point we are making:

12 (a) ńkwà ńzò (breadfruit tree by the way side)

(b) ńkwā ńzo (ńzò's breadfruit tree)

From (a) it is obvious that this class of items does not change their tone pattern if and only if they are in both first and second positions, or they are followed by a noun of Tone class 1 (a)

ńdò áhyā (market position)

But in combination with other Tone Classes, they assume a non-inherent tone thus:

13 (a) ńdò ≠ ànyí → ńdò ānyí (Our market position)
(cl.3) (cl.2)

(b) ńrū ≠ àla → ńrū àla - (humus)
(cl.3) (cl.4)

(c) ńdhù ≠ jí → ńdhù jī (The tail of yam)
(cl.3) (cl.1 (b))

(d) ńdò ≠ ńhá → ńdò ńhá (Their market position)
(cl.3) (Pron. Cl.1(b))

(e) ńdhù ≠ ńhá → ńdhù ńhá (Their tails)

13 (d) and (e) are exceptions to the rule because of the pronoun ńhá in second position. With the exception of ànyí (which behaves like a Tone class 2 noun in second position) all other pronouns maintain their inherent tones if the preceding noun ends on a low tone.

TONE CLASS 4 - This class is made up of low-low tone nouns such as:

àla ground, soil

ábha jaw

íkhwu curse

They have the underlying phonological structure

$$\begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \quad \begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix}$$

In first or pregenitival position, their final low tone becomes high; in second or genitival position, they maintain their inherent tones.

tone classes 5 (a) & (b)

This class has been set up to account for Proper names or Personified nouns of Tone Class 1 (a) such as Ánya, Ọ́nụ́, as well as those Tone Class 3 - such as Íbè, Ụ́bọ́cị, which form the 5 (b) class. As we pointed out earlier on (p. 137) these nouns do not behave like members of their classes probably because of the semantic contrasts which must be maintained between such pairs as:

14 (a)	íshi	anyā	vs	íshi	Ānya
	the head of the eye			Anya's head	
(b)	íshĩ	ọ́nụ́	"	íshĩ	Ọ́nụ
	smelling mouth			Onu's (body) smell	
(c)	ńkwụ	ụ́zọ	"	ńkwụ	Ụ́zọ
	roadside palm tree			Uzo's palm tree	

Tone Class 5 (c)

To be considered as submembers of this idiosyncratic class are those nominals in Igbo which begin with the bilabial nasal /m/. These include:

māi	wine
mānụ	oil
mīrĩ	water
mụ́ọ	spirit, ghost

Their number is very small, indeed; in second or genitival position, they behave exactly like personified (Proper names) of Tone Class 1 (a), as the following data show:

15 (a)	ézigbo	mānụ	genuine oil, good oil
(b)	òtilé'	māi	the bottom of wine, the dreg of wine
(c)	íshi	mīrĩ	the head stream
(d)	àlǎ	mīrĩ	river/sea bed

We decided, on phonological grounds, to group them separately from members of 5 (a) with which they share identical tonal behaviour in second position.

3.5 APPLICATION OF Tn-RULES TO IGBO NOMINAL CONSTRUCTION

The importance of tone in the syntax of the Igbo language has been repeatedly pointed out in this thesis as well as in all descriptions of the language. In this section, we shall examine, taking each tone class in turn, the series of phonological rules necessary for the generation of the tone patterns of what has been variously described as Genitival Structures or Igbo Completive Phrase.⁸ The evidence from Igbo syntax suggests that the same rules which generate ~~the tone~~ patterns of nouns in Genitival structures could also account for the tone patterns of most, if not all, Nominal constructions in the Igbo language. In particular, Relativized Clauses seem to be the underlying form of some of these $NP \left[\begin{smallmatrix} N * N \end{smallmatrix} \right]_{NP}$ structures, and it is possible to demonstrate that these structures derive from a certain category of Relative clauses via Relative Clause Reduction.

First of all, let us observe that there is nothing radically new in what we are about to say concerning Igbo genitival constructions. These have been fairly adequately treated by Green and Igwe (1963, p. 20-23). Their findings on this subject hold good for Ohuhu dialect as for most, if not all, dialects of Igbo. But the wider implications of this tonal phenomenon do not seem to have been fully realised in a Grammar such as Green and Igwe's, whose main concern was to observe the data and describe them.

8 Voorhoeva, Jan; A.E. Meeussen and K.F. De Blois refer to the same construction as "Igbo Completive Phrases" in an article "New proposals for the description of Igbo Completive Phrases" in *Journal of West African Languages* 6, p. 79-84.

Our purpose here is to go beyond the surface nominal constructions, relate them and their characteristic tone patterns to Relative clauses and associated patterns, and in a systematic way show that some Reduction rules have operated on certain Relative clauses to produce such nominal constructions as the Genitival ones being discussed here.

We take the Noun classes in turn, pointing out as we go along how they behave in first or pregenitival and then in second or genitival positions:

16 TONE CLASS 1 (b)

$$\begin{array}{c}
 16 \quad J\acute{i}' \quad \quad \quad C\acute{i}' \quad \quad \quad J\acute{i}' \quad \bar{i} \quad C\acute{i} \\
 \left[\begin{array}{c} +S \\ +R \end{array} \right] \neq \left[\begin{array}{c} -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} +S \\ +R \end{array} \right] \longrightarrow (a) \left[\begin{array}{c} +S \\ +R \\ 1 \end{array} \right] \left[\begin{array}{c} -S \\ +R \\ 2 \end{array} \right] \left[\begin{array}{c} +S \\ +R \\ 2 \end{array} \right] (C\acute{i}'\text{'s } yam) \\
 \text{OR} \\
 (b) \quad J\acute{i}' \quad \bar{C}\bar{i} \\
 \left[\begin{array}{c} +S \\ +R \\ 1 \end{array} \right] \left[\begin{array}{c} +S \\ +R \\ 2 \end{array} \right]
 \end{array}$$

The detailed derivation of 16 (a) and (b) have been given on page and need not be repeated here. What the above output (16 (a) & (b)) predict is that all nouns of one syllable in second or genitival position will have these two possible surface structures. If a pronoun (monosyllabic) is substituted in second position for $C\acute{i}'$, there is only the (b) possibility, (cf 3.3 p. 136).

Thus we find:

- (c) $D\acute{i}'$ $\tilde{h}\bar{a}$ but not $*D\bar{i}\bar{i}$ $\tilde{h}\bar{a}$
 husband their: their husband
- (d) $J\acute{i}'$ $y\bar{a}$ but not $*J\bar{i}\bar{i}$ $y\bar{a}$
 His yam

This fact therefore requires that Ton Simplification rule apply immediately after Downdrift rules have applied, if the second or genitival noun is a pronoun, in order to avoid the deviant output.

TONE CLASS 1(a) (high-high-nouns).

- 17(a) $\begin{bmatrix} i' \\ +S \\ +R \end{bmatrix} \begin{bmatrix} shi' \\ +S \\ +R \end{bmatrix} \neq \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} e' \\ +S \\ +R \end{bmatrix} \begin{bmatrix} ghú' \\ +S \\ +R \end{bmatrix} \longrightarrow (b)$
- (b) $\begin{bmatrix} +S \\ +R \\ 1 \end{bmatrix} \begin{bmatrix} +S \\ +R \\ 1 \end{bmatrix} \begin{bmatrix} +S \\ +R \\ 1 \end{bmatrix} \begin{bmatrix} +S \\ +R \\ 2 \end{bmatrix} \longrightarrow i'shi \ eghú \text{ (goat's head)}$

(For the details of derivation, see 3.3 p.136)

As 17(b) shows, all Tone class 1(a) nouns in genitival position have a downstep on their final high tone; and maintain their inherent tone in pregenitival position. As a matter of fact, all classes of nouns maintain their inherent tones before high-high-tone nouns; a few more representative examples illustrate this fact.

- 17(c) $\grave{o}k\acute{e} \neq \acute{q}hya \text{ (cl.2 \& 1b)} \longrightarrow \grave{o}k\acute{e} \ \acute{p}hy\bar{a}$
(bush rat)
- (d) $\acute{u}z\grave{o} \neq \acute{a}hya \text{ (cl.3 + 1b)} \longrightarrow \acute{u}z\grave{o} \ \acute{a}hy\bar{a}$
(the way to the market).
- (e) $\grave{a}bha \neq \acute{e}nyi \text{ (cl.4 + 1b)} \longrightarrow \grave{a}bha \ \acute{e}ny\bar{i}$
(an elephant's jaw)

Extending these facts about Tone class 1(a) nouns to other structures in this dialect, one can predict that in all subject verb forms, main (Initiating and Non-initiating),⁹ all nouns in Subject relation to the verb maintain their inherent tone. Hence we have the following tonal structure in contrast with the dialect described by Green and Igwe:

9 These terms are due to Green and Igwe (1963) A Descriptive Grammar of Igbo.

18(a) Ánya zàra ezhi' (our own dialect)

(b) Ánya^ zara ezhi' (Green and Igwe's dialect)

Anya swept the compound.

In our dialect, glides¹⁰ feature only in Subordinate, and never in Main, clauses.

TONE CLASS 2 - (Low-high)

As with Tone classes 1(a) and (b), Tone class 2 nouns maintain their inherent tones in first or pregenitival position, but acquire non-inherent tones in genitival position:

19

i'	shi'		o'	ke'		
$\begin{bmatrix} +S \\ +R \end{bmatrix}$	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	≠	$\begin{bmatrix} -S \\ -R \end{bmatrix}$	≠	$\begin{bmatrix} +S \\ -R \end{bmatrix}$	$\begin{bmatrix} +S \\ +R \end{bmatrix}$

(a)

$\begin{bmatrix} +S \\ +R \end{bmatrix}$	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	≠	$\begin{bmatrix} +S \\ -R \end{bmatrix}$	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	by Tone Simplification
1	1		4	2	" Downdrift rules
1	1		2	2	" Tone Assimilation

(b) → ishi oke (rat's head)

1 1 2 2

¹⁰ We do, however, have glides in proper names, which might be structurally seen as Independent or main clauses:

(Chúkwúma) God/Heaven knows.
(Elúma)

Chínyere. This is probably due to the need to distinguish the name from the sentence

Chúkwu mà hwe niile. God knows everything.
Chi' nyere ngpzi:- God gave-the blessing.

It seems, therefore, that whenever a name is a shortened form of an indicative sentence, its subject NP (if it is a Tone class 1 item) will have a falling glide. Note also the name Cidi from Ci' di: God exists.

20 With Tone Class 3 Nouns in First position

(a) $\begin{bmatrix} \overset{0}{\text{+S}} \\ \text{+R} \end{bmatrix} \begin{bmatrix} \text{dhū} \\ \text{+S} \\ \text{-R} \end{bmatrix} \neq \begin{bmatrix} \text{-S} \\ \text{-R} \end{bmatrix} \neq \begin{bmatrix} \overset{0}{\text{+S}} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \overset{0}{\text{ke}} \\ \text{+S} \\ \text{+R} \end{bmatrix}$ Metathesis does not apply.

(b) $\begin{bmatrix} \text{+S} \\ \text{+R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \neq \begin{bmatrix} \text{-S} \\ \text{+R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{+R} \end{bmatrix}$ by Tone Raising (Tn-R.4)

(c) $\begin{bmatrix} \text{+S} \\ \text{+R} \\ 1 \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{-R} \\ 4 \end{bmatrix} \neq \begin{bmatrix} \text{-S} \\ \text{+R} \\ 2 \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{-R} \\ 5 \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{+R} \\ 3 \end{bmatrix}$ by Downdrift Rules Tn-Rules 5.
(a), (b) (c).

(d) $\begin{bmatrix} \overset{0}{\text{+S}} \\ \text{+R} \\ 1 \end{bmatrix} \begin{bmatrix} \text{dhū} \\ \text{+S} \\ \text{+R} \\ 2 \end{bmatrix} \neq \begin{bmatrix} \overset{0}{\text{+S}} \\ \text{-R} \\ 5 \end{bmatrix} \begin{bmatrix} \overset{0}{\text{ke}} \\ \text{+S} \\ \text{+R} \\ 3 \end{bmatrix}$ by Tone Simplification, Tn-Rule 7.
" " Assimilation, Tn-Rule 8.

(e) $\overset{0}{\text{dhū}}$ $\bar{\text{o}}\text{ke}$ (rat's tail)
1 2 3 3

If we increase this nominal structure by the addition of a Relative clause, the result will be 18(e) with its progressive downsteps represented by the following pitch values:

(f) $\overset{0}{\text{dhū}}$ $\bar{\text{o}}\text{ke}$ nwūry $\bar{\text{ā}}\text{nwū}$ the tail of a dead rat
1 2 3 3 4 4 5 5

21 With Tone Class 4 nouns in First position:

(a) $\begin{bmatrix} \overset{A}{\text{+S}} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{LA} \\ \text{+S} \\ \text{-R} \end{bmatrix} \neq \begin{bmatrix} \overset{A}{\text{+S}} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{NYI} \\ \text{+S} \\ \text{+R} \end{bmatrix}$

(b) $\begin{bmatrix} \text{A} \\ \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{LA} \\ \text{+S} \\ \text{-R} \end{bmatrix} \neq \begin{bmatrix} \text{-S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{A} \\ \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{NYI} \\ \text{+S} \\ \text{+R} \end{bmatrix}$ by Tn-Rule 2

(c) $\begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{+R} \end{bmatrix} \neq \begin{bmatrix} \text{-S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{+R} \end{bmatrix}$ by Tone Raising

(d) $\begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{+R} \end{bmatrix} \neq \begin{bmatrix} \text{+S} \\ \text{-R} \end{bmatrix} \begin{bmatrix} \text{+S} \\ \text{+R} \end{bmatrix}$ by Tone Simplification

3 1 4 2 " Downdrift rules

3 1 2 2 " Tone Assimilation.

21 (e) alá ̄anyị - our land/country

3 1 2 2

The same set of rules that generate 20 (e) and 21 (e) also account for the following: noun and demonstrative structure (Deictic Structure)

22 (a) éze ≠ Ā → ézē ē this chief

(b) mādū ≠ Ā → mādū ō " person

It will be recalled (3.4. p.137-38) that whenever two nouns of Tone class 3 are in a Genitival construction, they maintain their inherent tones provided that the genitival (second) noun is neither personified nor is it a proper name. This rather important condition accounts for the following structures:

23 (a) úkhwa ≠ úzọ → úkhwa úzọ

breadfruit tree by the road side

(b) éze ≠ Āhi → ézē ēhi (that chief)

(c) mādū ≠ Āhi → mādū ōhi (that person)

tone class 3 nouns with tone class 1(b) in second position

Before we go on to the other Tone classes, let us look at the tone pattern of class 3 nouns whenever they are followed by Monosyllabic high-tone items. The following illustrate the tone patterns to be discovered:

24 (a) ótú ≠ nwa' → ótú̃ nwā

one child, an only child

(b) úcē ≠ Cí' → úcē̃ Cī

God's will

(d) ng'wug'wu ≠ shi' → ng'wug'wū̃ shī̃

a parcel of excreta

(d) úcē ≠ { m' / ya / ña } → úcē ≠ { m' / ya / ña } my opinion
his/her opinion
their opinion

In all these examples, except (d), the need for a downstep on the monosyllabic nouns in second position has entailed the development of a rising glide on the preceding nouns. As example 24 (d) shows, the development of this glide is blocked if the second element is a pronoun. (Cf with an identical phenomenon involving monosyllabic nouns in pre-genitival position. In 16(c-d) as here, the alternative structure

dii Chi (Chi's husband) is blocked before pronouns; hence *diĩ ya is unacceptable). It is a general rule of Igbo phonology that glides never occur before pronouns.

The question to be asked is this: Can the phonological rules cope with structures such as 24 (a), (b) and (c)? The answer is yes, provided that some essential addition is made. The addition (or condition) is this: In order to provide for Tone incorporation, two non-segmental low tones must be present in underlying form, otherwise there is no way of generating glide tones on Tone classes 3 and 4 nouns.

Now, let us consider the following underlying form for (a)-(c) nominal structures:

$$25(a) \quad \begin{array}{c} \text{U} \\ +S \\ +R \end{array} \quad \begin{array}{c} \text{che} \\ +S \\ -R \end{array} \neq \begin{array}{c} -S \\ -R \end{array} \neq \begin{array}{c} \text{chi} \\ +S \\ +R \end{array}$$

The underlying form, 25(a) does not meet the structural description for any of the relevant rules such as Metathesis or Tone Raising rule. It does not therefore advance the generation of the desired tone pattern. But 25(b) with two non-segmental low tones does:

$$25(b) \quad \begin{array}{c} \text{U} \\ +S \\ +R \end{array} \quad \begin{array}{c} \text{che} \\ +S \\ -R \end{array} \neq \begin{array}{c} -S \\ -R \end{array} \neq \begin{array}{c} -S \\ -R \end{array} \neq \begin{array}{c} \text{chi} \\ +S \\ +R \end{array}$$

$$(c) \quad \begin{array}{c} +S \\ +R \end{array} \quad \begin{array}{c} +S \\ -R \end{array} \neq \begin{array}{c} -S \\ +R \end{array} \neq \begin{array}{c} -S \\ -R \end{array} \neq \begin{array}{c} +S \\ +R \end{array}$$

$$(d) \quad \begin{array}{c} \text{U} \\ +S \\ +R \end{array} \quad \begin{array}{c} \text{che} \\ +S \\ -R \end{array} \quad \begin{array}{c} +S \\ +R \end{array} \neq \begin{array}{c} -S \\ -R \end{array} \neq \begin{array}{c} \text{chi} \\ +S \\ +R \end{array}$$

by Tone Raising.

by Tone Incorporation

1 4 2 5 3 " Downdrift rules

1 4 2 ∅ 3 " Tone Simplification

25(e) úche[✓] chí[̄]

1 4 2 3

Now, for some speakers, there is an alternative form - úchē chí[̄].

This is equally derivable from 25(c) via the following rules:

25(c)	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	$\begin{bmatrix} +S \\ -R \end{bmatrix}$	\neq	$\begin{bmatrix} -S \\ +R \end{bmatrix}$	\neq	$\begin{bmatrix} -S \\ -R \end{bmatrix}$	\neq	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	
(d1)	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	$\begin{bmatrix} +S \\ -R \end{bmatrix}$	\neq	$\begin{bmatrix} -S \\ +R \end{bmatrix}$	\neq	$\begin{bmatrix} -S \\ -R \end{bmatrix}$	\neq	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	
	1	4		2		5		3	by Downdrift rule
	1	∅		2		5		3	" Tone Simplification
	1	∅		2		∅		3	" " Simplification
(e1) →		úchē		chí [̄]					
		1	2	3					

Whichever form one decides to generate, it will be necessary to stipulate two underlying non-segmental low tones. The addition or modification provides the bridge between Nominal structures such as Noun + noun and Noun + Relative clauses. In both types of structures, Tone classes 3 and 4 nouns (and any lexical item with a final low tone) behave identically:

Examples:

- 26(a) Ōgu[✓] zūru ohí[̄] : Ogu who stole
- (b) Íbē[✓] gāra ñkpqrō ... Ibe who went to prison
- (c) Ñkata[✓] gbūru mādhū[̄] ...: Nkata the murderer
- 27(a) Ọkúyọ[̄] ufū[✓] vūuru: the chicken which the fox carried away.
- (b) Ûwē[✓] Ibē[✓] tìrile ... the clothes which Ibe has worn.
- (c) Ébē[✓] àlā[✓] rūrula since the soil has been desecrated.
- (d) Ọtho Diakhū[✓] mēre .. how Diakhū acted

The two categories of Relative Clauses involved in the above data have been discussed in detail 2.4.8.

TONE CLASS 4 NOUNS (LOW - LOW NOUNS)

As is now obvious from the discussion of Tone Class 3 Nouns, Tone class 4 nouns retain their inherent tones in second position, but acquire a non-inherent tone pattern in first position if they are followed by

either Tone Class 2 or 4 nouns. With the other Tone classes, they maintain their inherent tones:

28(a) Àla ≠ nkwy → àla nkwȳ (no change)

palm tree plantation

(b) Àla ≠ ji' → àlǎ jī
(yam mound)

(c) Àla ≠ òké' → àlǎ òke
(rat land)

(d) àla ≠ Ngwurú' → àlǎ Ngwurú'

the land belonging to Ngwuru

The derivation of 28(b)-(d) is similar to that of 25(e1). Only one example is given here to illustrate the point.

29(a) $\begin{bmatrix} A' \\ +S \\ -R \end{bmatrix} \begin{bmatrix} la' \\ +S \\ -R \end{bmatrix} \neq \begin{bmatrix} ' \\ -S \\ -R \end{bmatrix} \neq \begin{bmatrix} N' \\ +S \\ -R \end{bmatrix} \begin{bmatrix} gwú' \\ +S \\ -R \end{bmatrix} \begin{bmatrix} rú' \\ +S \\ +R \end{bmatrix}$
(b) $\begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix} \neq \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix}$

by Tone Raising

3 1 4 4 4 2 by Downdrift

3 1 ∅ 4 4 2 " Tone Simplification

(c) → àlǎ Ngwurú'

3 1 4 4 2

In a Relative clause structure, àla will become àlǎ or àlǎ, hence two non-segmental low tones will be necessary in underlying form thus:

30(a) $\begin{bmatrix} A' \\ +S \\ -R \end{bmatrix} \begin{bmatrix} la' \\ +S \\ -R \end{bmatrix} \neq \begin{bmatrix} ' \\ -S \\ -R \end{bmatrix} \neq \begin{bmatrix} ' \\ -S \\ -R \end{bmatrix} \neq \begin{bmatrix} gbu' \\ +S \\ +R \end{bmatrix} \begin{bmatrix} rú' \\ +S \\ +R \end{bmatrix} \times$
(b) $\begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix} \neq \begin{bmatrix} -S \\ +R \end{bmatrix} \neq \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix}$ by Tone Raising
(c) $\begin{bmatrix} +S \\ -R \end{bmatrix} \begin{bmatrix} +S \\ -R \end{bmatrix} \neq \begin{bmatrix} -S \\ +R \end{bmatrix} \neq \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} +S \\ +R \end{bmatrix} \begin{bmatrix} +S \\ +R \end{bmatrix}$ by Tone Incorporation
(d) $\begin{bmatrix} a \\ +S \\ -R \end{bmatrix} \begin{bmatrix} la \\ +S \\ -R \end{bmatrix} \neq \begin{bmatrix} a \\ -S \\ +R \end{bmatrix} \neq \begin{bmatrix} ' \\ -S \\ -R \end{bmatrix} \begin{bmatrix} gbu \\ +S \\ +R \end{bmatrix} \begin{bmatrix} ru \\ +S \\ +R \end{bmatrix}$
3 3 1 4 2 2 by Downdrift
3 3 1 ∅ 2 2 by Tone Simplification

\longrightarrow 30(e):
 30(e) àlǎ' gbūru x
 3 3 1 2 2

The nature of the object NP, X will determine whether a downstep is necessary or not. If it is a Tone Class 1(a) noun (high-high), then it will have a downstep on its final syllable, and this will entail a non-segmental low tone in underlying form. These details are reserved till the appropriate section 3.6 on Relativization.

TONE CLASS 5(a) Personified/Proper names of Tone Classes 1(a)

First Tone Class 1(a) (high-high).

These are very easy and straightforward to generate:

31(a) Nwá' ≠ Ánya \longrightarrow Nwá' Ānya
 (b) $\begin{bmatrix} +S \\ +R \end{bmatrix}_1 \neq \begin{bmatrix} -S \\ -R \end{bmatrix}_4 \neq \begin{bmatrix} +S \\ +R \end{bmatrix}_2 \begin{bmatrix} +S \\ +R \end{bmatrix}_2$ by Downdrift
 1 ∅ 2 2 " Tone Simplification
 \longrightarrow nwá' Ānya : Anya's son.
 1 2 2

What is peculiar about these proper names or personified nouns is the fact that, although their underlying form meets the structural index for Metathesis rule, this rule, in fact, does not apply. The non-segmental low tone is present only to lower the following high tone and is deleted after the application of Downdrift rules. A few more examples include:

32(a) éǵ'o' ≠ Díkhē \longrightarrow éǵ'o' Díkhē
 Dikhe's money
 (b) àkwú' ≠ Égbe \longrightarrow àkwú' Ēgbe
 the nest of Egbe (Hawk personified or proper name)
 (c) úlō' ≠ Áǵ'u' \longrightarrow úlō' Āǵ'u'
 Ag'u's house

32(d) ǫ̃rũ ≠ Íkhe → ǫ̃rũ Íkhe

Ikhe's farm.

tone class 5(b)

Secondly, Tone Class 3 nouns - (high-low)

In second or genitival position, proper names of Tone Class 3 behave like

Tone class 4 nouns in changing from high-low to low-low tone pattern.

The generation of their tone pattern is as follows:

33(a)	ã	lã	≠	Í	bẽ	
	+S	+S		+S	+S	
	-R	-R		+R	-R	
(b)	+S	+S	≠	+S	+S	by Tone Raising Rule
	-R	+R		+R	-R	
(c)	+S	+S	≠	-S	+S	by Metathesis Rule
	-R	+R		-R	-R	
	3	1		4	4	" Downdrift Rules
(d)	+S	+S	≠	+S	+S	
	-R	+R		-R	-R	by P-Rule 9. Tone Reduction
	3	1		4	4	
(e)	→	àlá		Ìbe		
		3 1		4 4		

Admittedly, our reduction rule is ad hoc; this is because it is intended to handle a rather peculiar situation which is not widespread in the language, but limited only to proper names of Tone class 3 in second or genitival position. What the rule does is delete the initial segmental high tone whenever it is followed in this type of structure by two consecutive low tones, and give segmental status to the non-segmental low tone. This rule has to be added if we are to get the right tone pattern (33(e)) in surface structure.

It will be observed that the Tone Raising rule applied here before the Metathesis rule. This is contrary to the order established by Williamson¹¹

¹¹ Williamson, Kay. "Some alternative proposals for Igbo Completive Phrase" RESEARCH NOTES; Vol. 3, part 2 & 3, Dept. of Linguistics and Nigerian Languages, Ibadan Nigeria, 1971 (p.87).

that Metathesis Rule must precede Tone-Raising Rule. If Metathesis had applied before Tone Raising to 31(b), the output would have been

$\begin{bmatrix} +S \\ -R \end{bmatrix}$	$\begin{bmatrix} +S \\ -R \end{bmatrix}$	$\begin{bmatrix} +S \\ +R \end{bmatrix}$	$\begin{bmatrix} -S \\ -R \end{bmatrix}$	$\begin{bmatrix} +S \\ -R \end{bmatrix}$
--	--	--	--	--

This output does not meet the structure index for Tone Raising Rule, which requires that the low tone to be raised must be flanked by low tones. It seems to us that no hard and fast rule must be imposed on the order of these Tone rules be they in syntax or phonology - until more facts about the Igbo Languages are known. Apparently, the Ibadan workshop did not consider proper names of Tone class 3 in second or genitival position and in subordinate Relative clauses where the phonological rules being discussed ought to apply also.

TONE CLASS 5(c)

This class comprises those lexical items in Igbo, generally of two or three syllable, which begin with the bilabial nasal /m/. These include

mány (oil) mīrī (water) mǎi (wine) et cetera.

Tonally, these nouns behave exactly like members of 5(a):

34(a)	ézhigbo	≠	mǎi	→	ézhigbo	mǎi
	genuine		wine		very good	wine
(b)	íhū	≠	mūō	→	íhū	mūō (a shrine)
(c)	ábha	≠	mīrī	→	ábha	mīrī
	bottle		water		water	bottle

They have been set up as a separate sub-class on the purely semantic ground that 5(a) and (b) deal with proper names where this sub-class 5(c) does not, moreover, phonologically members of 5 (c) form a set.

In the noun classification we have been discussing here in section 4.3, we have discussed only one-syllable or two-syllable nouns as if polysyllabic nouns are non-existent in Igbo. The fact is that the tone changes being discussed here operate regularly with one-syllable and two-syllable nouns. For example, downsteps do not generally occur with

The operation of this tone change does not depend on the number of syllables present, but on the nature of the adjacent syllables across word boundary.

In the following section (3.6), we shall examine the application of some of these Tone rules to Relative Clause formation in Igbo.

3.6 Relativization and the Tone Rules

In this section, we shall trace the transformational relationship existing between certain relative clauses in Igbo and certain NPs of the $N \neq N$ structure which can be shown to represent a reduced form of these relativized clauses.

Examples of relative clause constructions in Igbo have been given in 2.4.2 and 2.4.5, although the basis for the distinction into Relatives A & B due to Green and Igwe (1963) was not made very explicit. Briefly, Relative A represents that category of relative clauses whose formation does not entail any NP movement rule, while Relative B stands for those whose formation entails the movement of an NP from an object position to a subject one. As we pointed out in 2.4.2, in Relative A, all verbs, regardless of their tone class, have their stem on a downstep, whereas in Relative B, only class 1 verbs have their stem on downstep, while those of classes 2 & 3 are on low tone. Were it not for this difference in the tonal behaviour of verbs in Relative B, it would have been unnecessary to distinguish between two categories of relative clauses in Igbo, since a simple NP movement rule would be sufficient to relate the two. But since tone forms an integral part of Igbo syntax, this tonal distinction between the same verbs in the two categories of relative clauses in this language must be recognised as a valid justification for such a distinction into Relatives A & B.

The following examples are given to illustrate this tonal difference.

Relative A

37(a) Ógú̃ gāra ahyā́ faa lórò faá́ (vb ígā́ cl.3)

Ogu who went to market early returned early.

37(b) Èkhé dhàra elū āgbakheele (vb ídhà cl.2)

Ekhe who had a fall has recovered.

(c) Ónye ñūrū mai m̄ gā akwú m̄ygwọ (vb íñū cl.1)

Whoever drank my wine will pay me the cost.

Relative B

38(a) Áhya Ogū gāra dī uthí (vb iga cl.3)

The market which Ogu went is far.

(b) Élu nkū Ekhe dhàra ehile. (vb ídhà cl.2)

Height of palmtree which Ekhe fell is much:

The oil palm tree from which Ekhe fell is rather high.

(c) Mai ọ ñūrū nà egbú yā (vb íñū cl.1)

The wine which he drank is intoxicating him.

While all the verbs in Relative A are on downstep, only class 1 verbs are on the same downstep in Relative B. Only Relative A clauses are relevant in the reduction transformation which derives $N \neq N$ from relative clauses.

It is the similarity between certain Igbo relative clauses on the one hand and certain NPs of the $N \neq N$ structure on the other that we now want to examine in detail. It seems that such NPs are derivable from certain relative clauses via the Relative clause Reduction rule. As an example, consider the following sentence - 39(a) and its transform 39(b)

39(a) Nwānyị rēghe mānụ nọ n'òdò yá

The woman who is selling oil is in her shade/stall.

(b) Nwānyị mānụ nọ n'òdò yá

The woman of oil is in her stall; The woman oil dealer is in her stall.

The above 39 derive from a deep structure such as is represented in Fig. 1.

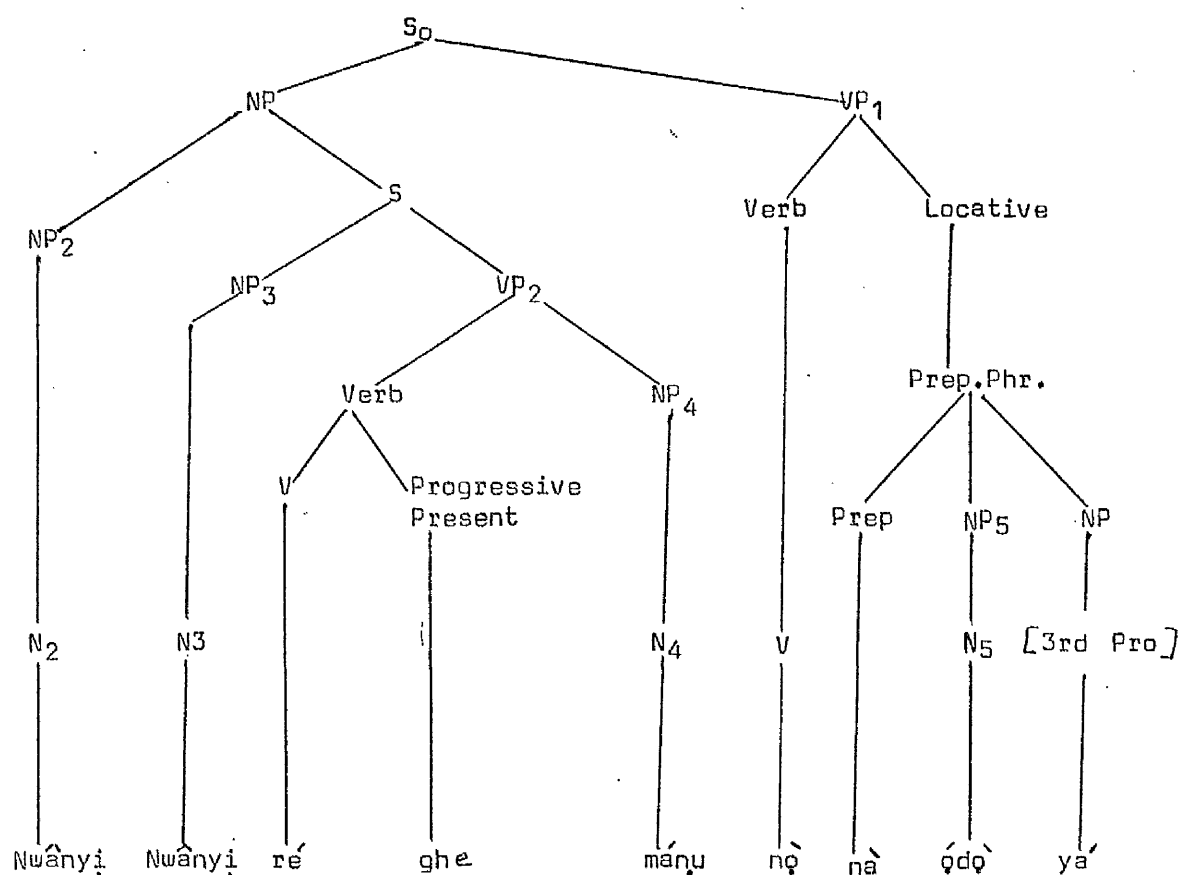


Fig. 1

Let us assume that the rules of Relative deletion, Affix hopping and the phonological rule of vowel harmony have applied to Fig. 1 to produce 39 (c).

39 (c) Nwanyi reghe manyu no na odo ya.

In order to become the input to the Tone rules which produces the tone pattern of 39(a), the above 39(c) has to be decomposed into a set of

phonological features by Tn-Rules 1 and 2; hence 39(c) becomes 39(d)

with the boundary symbols introduced.

$$39(d) \quad \# \left[\begin{array}{c} \text{Nwa} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{a} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{nyi} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ré} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{ghé} \\ +S \\ +R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ma} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{nú} \\ +S \\ +R \end{array} \right] \neq \left[\begin{array}{c} \text{no} \\ +S \\ +R \end{array} \right] \neq$$

Rel. Cl. Rel. Cl.

$$\left[\begin{array}{c} \text{na} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{o} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{dó} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ya} \\ +S \\ +R \end{array} \right] \neq \#$$

39(d) becomes 39(e) by Tone Raising Rule (Tn-Rule 4)

$$39(e) \quad \# \left[\begin{array}{c} \text{Nwa} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{a} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{nyi} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ +R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ré} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{ghé} \\ +S \\ +R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ma} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{nú} \\ +S \\ +R \end{array} \right]$$

$$\neq \left[\begin{array}{c} \text{no} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{na} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{o} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{dó} \\ +S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ya} \\ +S \\ +R \end{array} \right] \neq \#$$

As 39(e) shows, the first non-segmental low tone has been raised ready

for incorporation as the final high tone of the nominal $\text{Nw\hat{a}ny\hat{i}i}$. Thus,

39(e) becomes 39(f) by Tone Incorporation.

$$39(f) \quad \left[\begin{array}{c} \text{Nwa} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{a} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{nyi} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{i} \\ +S \\ +R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ré} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{ghé} \\ +S \\ +R \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \end{array} \right] \neq \left[\begin{array}{c} \text{ma} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{nú} \\ +S \\ +R \end{array} \right]$$

$$\neq \left[\begin{array}{c} \text{no} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{na} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{o} \\ +S \\ +R \end{array} \right] \left[\begin{array}{c} \text{dó} \\ +S \\ -R \end{array} \right] \left[\begin{array}{c} \text{ya} \\ +S \\ +R \end{array} \right] \neq \#$$

39(f) becomes 39(g) by Downdrift Rules.

$$39(g) \quad \# \left[\begin{array}{c} \text{Nwa} \\ +S \\ +R \\ 1 \end{array} \right] \left[\begin{array}{c} \text{a} \\ +S \\ -S \\ 4 \end{array} \right] \left[\begin{array}{c} \text{nyi} \\ +S \\ -R \\ 4 \end{array} \right] \left[\begin{array}{c} \text{i} \\ +S \\ +R \\ 2 \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \\ 5 \end{array} \right] \neq \left[\begin{array}{c} \text{ré} \\ +S \\ +R \\ 3 \end{array} \right] \left[\begin{array}{c} \text{ghé} \\ +S \\ +R \\ 3 \end{array} \right] \neq \left[\begin{array}{c} \text{ } \\ -S \\ -R \\ 6 \end{array} \right] \neq \left[\begin{array}{c} \text{ma} \\ +S \\ +R \\ 4 \end{array} \right] \left[\begin{array}{c} \text{nú} \\ +S \\ +R \\ 4 \end{array} \right]$$

$$\neq \left[\begin{array}{c} \text{no} \\ +S \\ -R \\ 7 \end{array} \right] \neq \left[\begin{array}{c} \text{na} \\ +S \\ -R \\ 7 \end{array} \right] \neq \left[\begin{array}{c} \text{o} \\ +S \\ +R \\ 5 \end{array} \right] \left[\begin{array}{c} \text{dó} \\ +S \\ -R \\ 8 \end{array} \right] \neq \left[\begin{array}{c} \text{ya} \\ +S \\ +R \\ 6 \end{array} \right] \neq \#$$

Observe here in 39(f) that, although the structural description for

Metathesis rule (Tn-Rule 3) application has been met at two places, viz: at

$$\begin{aligned} & \# \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} \text{ré} \\ +S \\ +R \end{bmatrix} \begin{bmatrix} \text{ghé} \\ +S \\ +R \end{bmatrix} \neq \text{and} \\ & \# \begin{bmatrix} -S \\ -R \end{bmatrix} \neq \begin{bmatrix} \text{mā} \\ +S \\ +R \end{bmatrix} \begin{bmatrix} \text{nū} \\ +S \\ +R \end{bmatrix} \neq \end{aligned}$$

the rule has not applied in either case.

The rule must be blocked in Relative clause formation in order to ensure that downsteps are on the right syllables in surface structure, that is at rēghe; and for its non-application before mānū, it has to be recalled that mānū belongs to Tone class 5(c) - words beginning with the bilabial nasal /m/, which in second/genitival position behave like proper names of Tone class 1 in having their downstep always on the first syllable.

Continuing the derivation, we derive 39(h) from 39(g) by the application of Tone Simplification iteratively until all remaining non-segmental low tones have been deleted.

$$\begin{aligned} 39(h) \quad & \# \begin{bmatrix} \text{Nwá} \\ +S \\ +R \\ 1 \end{bmatrix} \begin{bmatrix} \text{á} \\ +S \\ -R \\ 4 \end{bmatrix} \begin{bmatrix} \text{nyí} \\ +S \\ -R \\ 4 \end{bmatrix} \begin{bmatrix} \text{í} \\ +S \\ +R \\ 2 \end{bmatrix} \neq \begin{bmatrix} \text{rē} \\ +S \\ +R \\ 3 \end{bmatrix} \begin{bmatrix} \text{ghe} \\ +S \\ +R \\ 3 \end{bmatrix} \neq \begin{bmatrix} \text{mā} \\ +S \\ +R \\ 4 \end{bmatrix} \begin{bmatrix} \text{nū} \\ +S \\ +R \\ 4 \end{bmatrix} \neq \begin{bmatrix} \text{nò} \\ +S \\ -R \\ 7 \end{bmatrix} \\ & \neq \begin{bmatrix} \text{nà} \\ +S \\ -R \\ 7 \end{bmatrix} \neq \begin{bmatrix} \text{ó} \\ +S \\ +R \\ 5 \end{bmatrix} \begin{bmatrix} \text{dò} \\ +S \\ -R \\ 8 \end{bmatrix} \neq \begin{bmatrix} \text{yá} \\ +S \\ +R \\ 6 \end{bmatrix} \neq \end{aligned}$$

Deleting the boundary symbols, one gets 39(c)

$$\begin{aligned} (i) \quad & \text{Nwáányíí} \quad \text{rēghe} \quad \text{mānū} \quad \text{nò} \quad \text{nà} \quad \text{ódò} \quad \text{yá} \\ & 1 \ 4 \ 4 \ 2 \quad 3 \ 3 \quad 4 \ 4 \quad 7 \ 7 \quad 5 \ 8 \ 6 \end{aligned}$$

By applying the morpheme structure rule 2(a) (2.1.p.37) to 39(i), we derive (j).

$$(j) \quad \text{Nwáányíí} \quad \text{rēghe} \quad \text{mānū} \quad \text{nò} \quad \text{nó} \quad \text{ódò} \quad \text{yá}$$

And 39(j) may be orthographically written as (k), which is the same as 39(a).

$$(k) \quad \text{Nwányí} \quad \text{rēghe} \quad \text{mānū} \quad \text{nò} \quad \text{n'ódò} \quad \text{yá}.$$

Sentence 39(a) or (k) above is a well-formed Igbo relative clause. If we apply the optional rule of Relative Clause reduction to the above (39(k),

the output will be 39(1) thus:

SD : $\left[\begin{array}{c} \text{Nw\`any\`i} \\ \text{NP} \end{array} \right] \left[\begin{array}{c} \text{r\`eghe} \\ \text{Rel. Cl.} \end{array} \right] \left[\begin{array}{c} \text{m\`an\`u} \\ \text{NP} \end{array} \right] \left[\begin{array}{c} \text{n\`o} \\ \text{Rel. Cl.} \end{array} \right] \text{n'od\`o} \text{y\`a'}$

NP	Verb	NP	VP
1	2	3	4

SC : 1 \emptyset 3 4 \Longrightarrow

39 (1) Nw\`any\`i m\`an\`u n\`o n'od\`o y\`a'

And 39 (1) is the same as 39 (b).

The effect of Relative Clause Reduction is to delete the verb of the Relativized sentence, leaving its object complement as a sort of attributive nominal, a fact which is better brought out in Fig. 2:

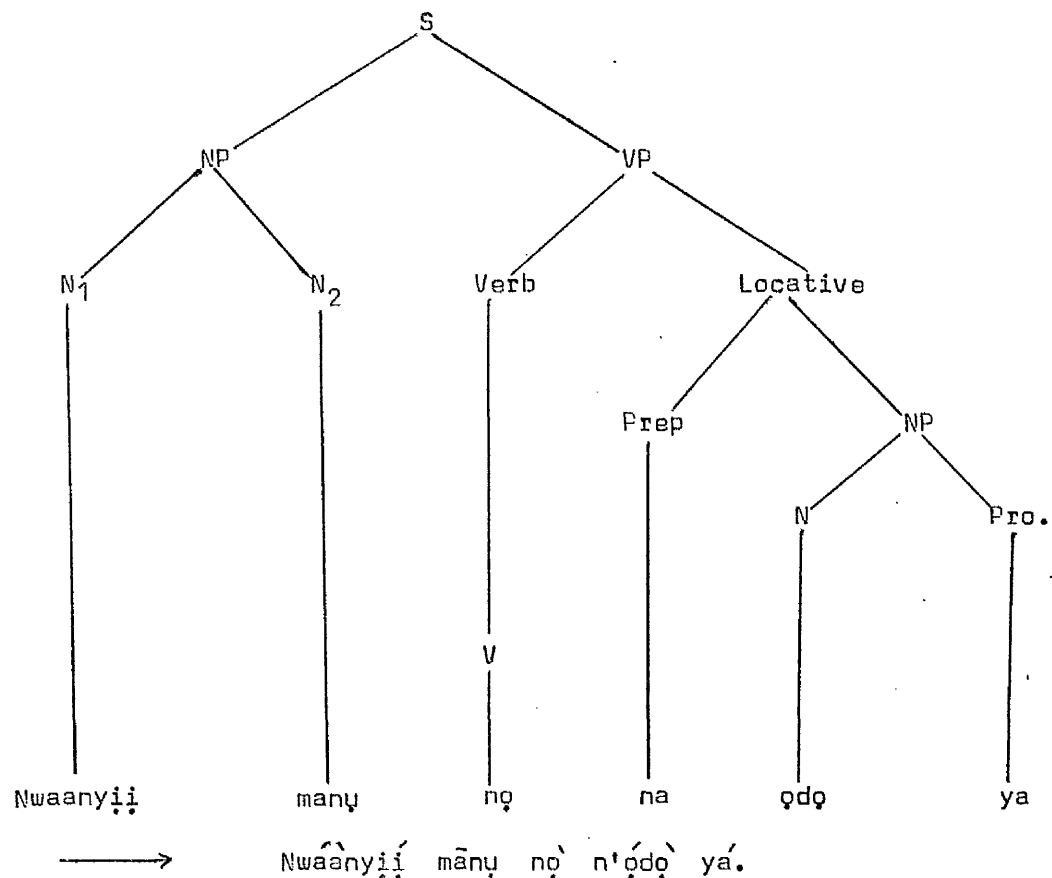


Fig. 2

It will be observed that the output of a Relative Clause Reduction rule is generally a Nominal structure in which the constituents have the

right tone relationship to each other. This fact provides a strong syntactic evidence in support of our claim that certain Igbo $N \neq N$ structures are^{the} product of Relative Clause Reduction. More examples of $NP \neq NP$ structures deriving from Relative Clause Reduction include:

- 40(a) $\text{Ónye na ēre eghū} \Rightarrow \text{Ónye eghū}$
 One who deals in goats A goat dealer
- (b) $\text{Ónye na āty āshī} \Rightarrow \text{Ónye āshī}$
 One who tells lies A liar
- (c) $\text{Ónye nwēre ñdidi} \Rightarrow \text{Ónye ñdidi}$
 One who has patience A patient person
- (d) $\text{Ónye na ēžūžū ñžūžū} \Rightarrow \text{Ónye nžūžū}$
 One who is stupid A stupid person
- (e) $\text{Ónye ēhī}^{\vee} \tilde{z}ūru \text{ōhī} \Rightarrow \text{Ónye \text{ōhī} ēhī}^{12}$
 person that who stole person of theft that
 that person who stole that thief
- (f) $\left\{ \begin{array}{l} \text{Mádhū}^{\vee} \\ \text{Mádhū} \end{array} \right\} \text{tūru āshī} \Rightarrow \text{mádhū-āshī}$
 (a person who told a lie) A liar)

However, it is not always the case that the output of Relative Clause Reduction is a well-formed Igbo nominal structure of the $N \neq N$ type. As examples, consider the following Relative clauses and the corresponding $N \neq N$ structures which derive from them via a reduction rule:

12 The Demonstrative item, a āhī this/that, is always the last element of a Nominal structure. So in order to derive $\text{Ónye \text{ōhī} ēhī}$ from $\text{Ónye ēhī}^{\vee} \tilde{z}ūru \text{ōhī}$, in addition to the Relative Clause Reduction rule, one has got to switch round the determiner element thus:

$\begin{array}{ccccc} * \text{Ónye} & \text{ēhī}^{\vee} & \text{ōhī} & \Rightarrow & \text{Ónye \text{ōhī} ēhī} \\ 1 & 2 & 3 & \Rightarrow & 1 \ 32 \end{array}$

In structures such as $\text{Ónye \text{ōhī} ēhī}$, $\text{Ónye \text{ōhī}}$ is taken as a unit of structure which is being modified by ēhī . The same is true of the Relative Clause $\text{Nwókho \text{ōhī} [\tilde{z}ūru \text{ōhī}]}$

Rel.S. Rel.S

where the Rel. Clause modifies the Nom. structure $\text{Nwókho \text{ōhī}}$: that man.

41(a) Nwānyíí tōro ogologo \Rightarrow Nwānyí ógologo

A woman who is tall: a tall woman

(b) $\left\{ \begin{array}{l} \text{Íbè' nà akpá} \\ \text{Íbè nà ākpá} \end{array} \right\} \text{ng'ang'a} \Rightarrow \text{Íbè ng'ang'a}$

" who is proud proud Ibe

(c) $\left\{ \begin{array}{l} \text{Ùg'ó' nà agbá} \\ \text{Ùg'o nà āgba} \end{array} \right\} \text{ùghala áhyā} \Rightarrow \text{Ùg'ó' ùghala áhyā}$

Ugo who does petty trading Ugo the petty trader.

In the examples 41(a)-(c) - that is Nominal Structures involving Nouns of Tone Class 3 and 4, in addition to Relative Clause Reduction, one has got to apply some other Tone adjustment transformations in order to get the right surface structure.

In 41(a), we suggest that a Glide Reduction rule is one such Tone change necessary: By this proposed rule,

Nwānyíí ≠ óg'ologo \Rightarrow Nwānyí ógologo

Condition: The Genitival Noun must begin with a high tone - that is

$\left[\begin{array}{c} \backslash / \end{array} \right] \rightarrow \left[\begin{array}{c} \backslash \end{array} \right] / \neq \left[\begin{array}{c} +S \\ +R \end{array} \right] \left[\begin{array}{c} +S \end{array} \right]$

In 41(b), the Glide Reduction could be formulated thus:

$\left[\begin{array}{c} \backslash / \end{array} \right] \rightarrow \left[\begin{array}{c} / \end{array} \right] / \neq \left[\begin{array}{c} +S \\ -R \end{array} \right] \left[\begin{array}{c} +S \\ -R \end{array} \right]$

Here it is important that the high tone resulting from a reduced glide be immediately followed by a sequence of two low tones, after which any other tone may follow.

Example: Ùg'ó' n'z'ogbú: Ugo the crusher or smasher

Apart from exceptions like those given and discussed under 41(a)-(c), Relative clause Reduction with Onye or such Tone classes as 1 and 2, and 5(c) nouns in pre-genitival or first position will generally result in an NP of (N ≠ N) structure with the appropriate tone pattern at the surface: Examples:

42(a) Nwókho na ēme ùghalama \Rightarrow nwókho ùghalama

A man who plays tricks A tricky man

- 42(b) Ónye na ēme afo oma \Rightarrow Ónye afooma
 A person who has kind disposition a kind person
- (c) Mádhùgbá nwēre obīēberè \Rightarrow Mádhùgbá obīēberè
 Mádhùgbá who has a kind heart Kind-hearted Madhugba
- (d) Nwókhō na ātụ ụjō \Rightarrow Nwókhō ụjō
 A man who fears A cowardly man

There is no doubt whatsoever that Relative Clause Reduction is a prolific source of the so called Igbo Genitival structures.

The implication of this finding is that Igbo derives NPs of $N \neq N$ structure through the same process which in Indo-European languages yields NP \neq Adjective structures, and this raises the question as to whether there is any lexical category Adjective in Igbo. This question is not pursued any further here since it is not within the scope of our investigation in this thesis.

Summary

In this chapter, it has been demonstrated that the phonological rules as given in Ibadan Research Notes (1971) coupled with the modifications which we have shown to be necessary will generate all the permissible tone patterns in Igbo nominal constructions, whether the structure is of the $N1 \neq N2$ type, or of a complex nominal of an NP and a relative clause. What these phonological rules have been geared to capture is the tone changes due to some basic syntactic relation as well as to other features of Igbo phonology. Where there is no difference between base and surface forms, no rules have been given to state this, or rather, the rules may be seen to have applied vacuously.

For the purposes of stating the Tone rules, Igbo nominals have been classified into 8 sub-categories thus:

Class 1(a)	-	high-high	-	ányá	'eye'
" 1(b)		high	-	Ǫí	'God'
" 2	-	low-high	-	óké	'rat'

Class 3	-	high-low	-	ukhwa	'breadfruit'
" 4	-	low-low	-	ala	'ground'
" 5(a)		high-high	-	proper names	
(b)		high-high		beginning with the syllabic nasal /m/ - maí	'wine'
(c)		high-low		proper names	

The surface tone patterns of these classes of items have been illustrated in section 3.5.

From the illustrations given in 3.5, the following facts emerge:

- (a) Relative clauses and generally structures which require one of their items to incorporate a non-segmental tone, must have two non-segmental low tones in underlying phonological form, unless the item in question is a monosyllable, in which case only one non-segmental low tone is necessary.
- (b) Nouns of classes 5(a-c) in second position constitute an exception to the rule of Metathesis (Tn-rule 3) even though they meet the structural description for it. This rule has to be blocked to ensure that the downstep is on the right syllable. The same situation obtains with relative clauses whose verb-stem is on a downstep in relation to the immediately preceding high tone of the nominal.
- (c) In order to derive Igbo NP's such as àlá Ìbè from àlá Ìbè, it is necessary to add an extra rule of Tone Reduction (Tn-Rule 9) which is similar to, though not the same thing as Tone Incorporation (Tn-Rule 7).
- (d) There is ample syntactic evidence in support of the view that the rule of Relative clause reduction produces in Igbo N1 N2 structures where the same rule in Indo-European languages, especially English, yields NP's of N Adj NP structures.

- (e) From the foregoing, the similarity between NPs of N1 N2 structure and relative clauses is very obvious, a fact which explains why the tone patterns of both types of nominal construction can be generated by the same set of Tone rules.

PART II

~~NON-CHARGE SENTENTIAL~~ COMPLEMENTATION IN 1980.

CHAPTER 4

Theoretical Orientation

4.0.0. The Grammatical Model and its Modification

The grammatical model on which this thesis in general is based is the revised version of Aspects model known as Extended Standard Theory, (EST)¹. But the nature of Igbo has dictated certain necessary modifications of this theory so as to allow it to describe the data concerning complementation. Since the examination of complementation is the topic of this thesis, the modifications are important and fundamental, because they constitute a slight departure from EST and a movement in the direction of Generative Semantics although we do not make any of the big claims associated with this brand of T.G. such as the claim that Deep structure is semantic. These departures from EST concern:

- (i) The specification of Complementizers in deep structure, and the justification for it is given in 4.3.0.
- (ii) The derivation of Pseudo-Cleft sentences from complement structures. The Pseudo-Cleft rule is a well-established transformational process, being a subset of the rules needed in Focus and Topicalisation. Its application to Igbo complement structure (cf p. 261 ff) yields an output with the structure of a relative clause in which the sentence-initial proform Ya' is replaced by hwe'. The substitution of hwe' for Ya' is structurally determined, as we argue on pages 244 ff. We describe this substitution as a kind of morphophonemic rule since it occurs at a superficial level of structure just before the application of relevant phonological rules.

1 See page 172

- (ii) In Igbo, Ya' and hwe' have a distributional relation similar to that between some and any in English. Any accurate description of Igbo complementation must account for the fact that there is a transformational relationship between complement constructions and their Pseudo-Cleft counterparts. Such a derivation may belong more to the theory of Generative Semantics than to Established Standard Theory, but we feel that a strict adherence to EST is bound to obscure certain important facts of Igbo, namely that a transformational relationship can be very easily established between complement constructions and their Pseudo-Cleft counterparts. This syntactic relationship must not be given up in favour of a principle which argues against lexical insertions at any other than the deep structure, especially when one realises that such a principle has been arrived at solely from the facts of Indo-European linguistics.

(iii) Derivation of Relative from Complement Structures

It will be seen from the above account that the derivation of relative clauses from underlying complement structures is a syntactic fact of the language for which no apology is needed. This topic has been discussed on pages 261 - 69 . When we invoke the hypothesis of 'Target Structures' on page 265 to try to account for this syntactic phenomenon, we do so because a comparable situation has been observed in Yoruba, a Kwa language just as Igbo is (cf. Awoyale 1974). The occurrence of this syntactic phenomenon in two typologically similar languages implies that it may not be random or isolated, nor should it be described as the analyst's artifact. Again this derivation may not be strictly in keeping with EST, but the facts of Igbo call for it.

(iv) Nominalisation of Factive Complements

Similarly, the nominalisation of a factive complement structure in Igbo yields a relative clause. Again, this is a syntactic which any accurate analysis must record, (cf pp. 267 ff.).

Such relative clauses are the Igbo equivalent of the English expression 'the fact that'. Thus, when an Igbo speaker uses the following 1 (a)

- 1 (a) Óhí Ogú ẓúru wùtere m'
- Theft (which) Ogu committed pained me.

he means:

The fact that Ogu stole pained me. Constructions such as the above are like other relative clauses in Igbo, but it is nevertheless necessary to show that they are transformationally related to factive complements in the language via the process of nominalisation.

Let us illustrate the process with the following 1 (b)

as the derived sentence from which 1 (a) is itself derived:

- 1 (b) Na' Ógú' ẓúru óhí wùtere m':
- That Ogu stole theft pained me:
- (The fact) that Ogu stole pained me.

Fig 1 is the structure underlying 1 (a) and (b).

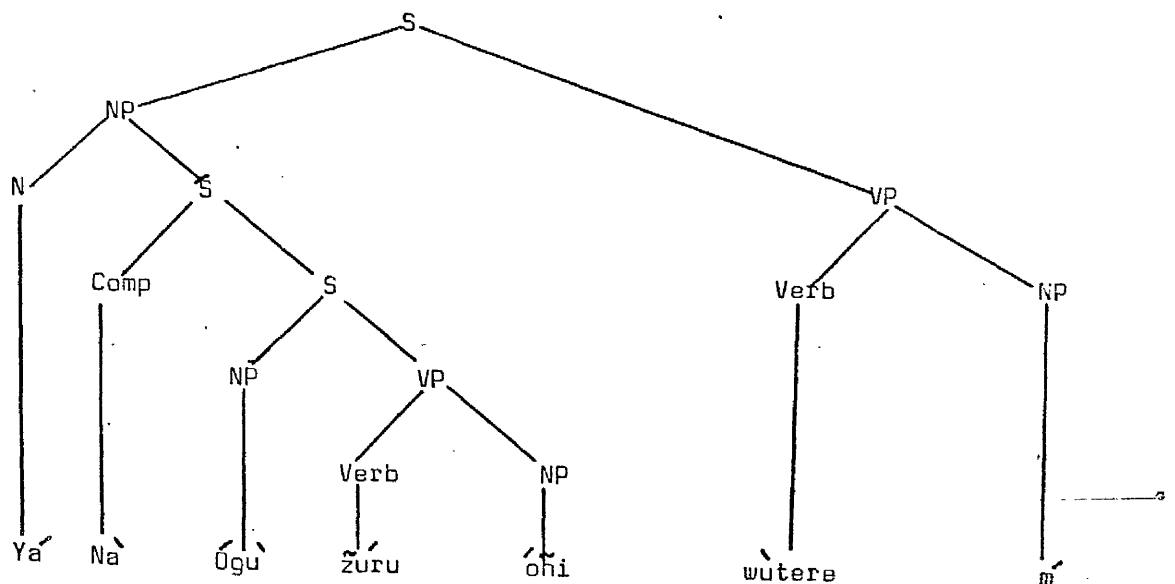


Fig. 1

From the above, we derive 1 (c) by obligatory Yá Deletion:

1 (c) Na` Ógu` žúru ohi wùtere m'

1 (c) is represented by Fig. 2

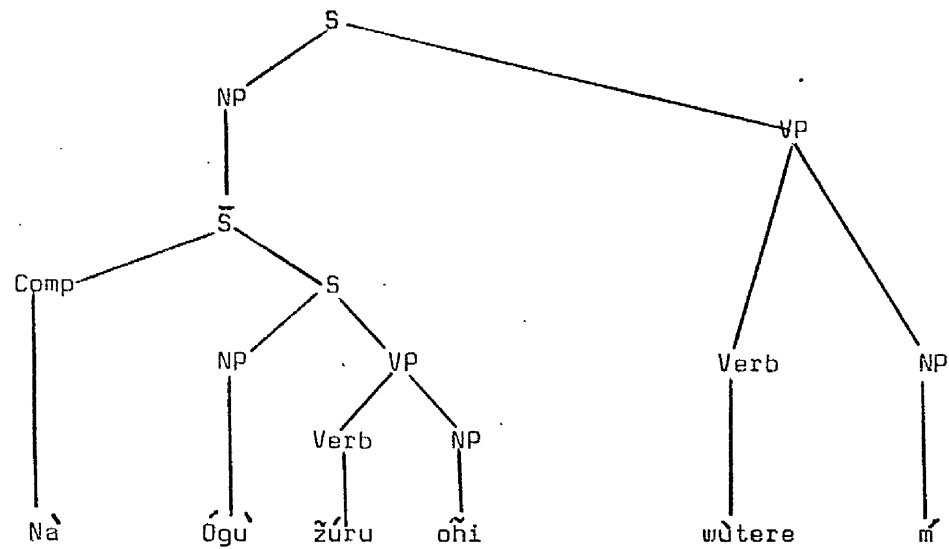


Fig. 2

From Fig. 2 we derive Fig. 3 by optional Relativization which entails in this case

- (i) The object NP Movement Rule (cf p. 267)
- (ii) Comp Deletion, and
- (iii) Tone Rules (phonological)

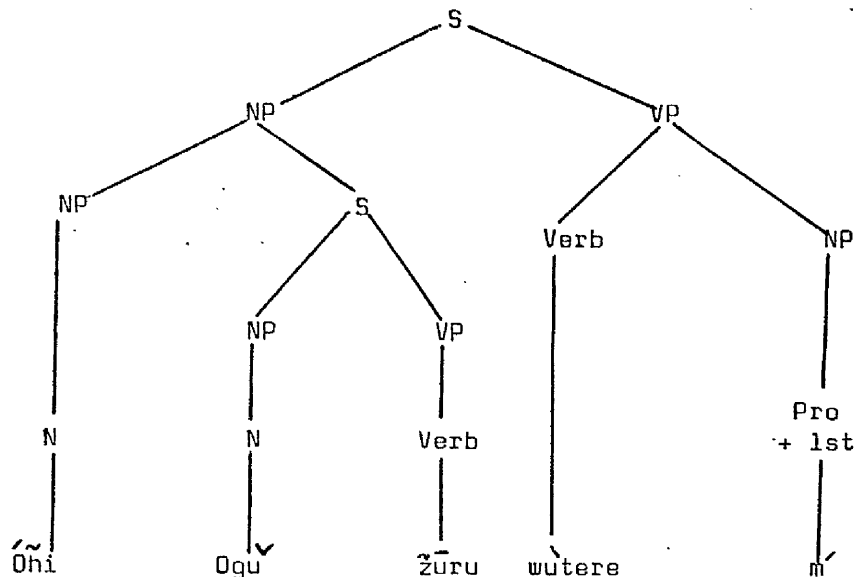


Fig. 3

The application of the relevant Tone rules to the surface structure shown in the above Fig. 3 yields the well-formed $l(d)$ which is the same as $l(a)$.

1 (d) Óhì Oǵú ẏúru wùtere ǎ

Theft which Ogu. committed pained ǎ : The fact

that Ogu stole pained.

Note that what the foregoing process shows is that one type of complex NP can be derived from another type; in this case, a relative clause type has been derived from an underlying factive complement type. This process is consistent with the grammatical model being used here, in so far as transformational rules are allowed to alter structures, but not meaning.

It has been argued that, since that subject NP of sentences such as 1(a) can be any nominal item, they should not be transformationally related to complement structures. But it needs to be emphasised that relative clauses do not subcategorize verbs as complement constructions do. What is involved here is complement-taking verbs: if such a verb is factive, then its complement can be nominalised to yield a factive relative clause. Any accurate account of Igbo complementation must recognise this fact, even if it means some deviation from the principles of EST.

(v) Igbo Equivalents of English WH-Questions i.e.

Kedu Questions

We divide this category of questions into

- (a) The Periphrastic Form (with Kèdú in Surface form), and
- (b) The Non-Periphrastic Form (without Kèdú in Surface form.)

All Igbo Kédú Questions of the above (a) type contain relative clauses as NP. This is a syntactic fact of the Igbo language, which can be very easily verified by examining the process of relativization in Igbo.

But we do not go into such an examination since relativization is not, strictly speaking, relevant in NP complementation. What we do on pages 345 ff is to relate the above two forms transformationally in a manner which is both systematic and consistent with the modified version of Aspects theory that we are following in this thesis. Observe that the rules central to relativization in Igbo are also involved here.

(vi) The Use of Dummy Symbols

The Aspects model also allows for the use of Dummy symbols, which serve as a trigger for relevant transformations, hence the use of Imp(erative), Cond(itional) and Q in the PS- rules. But their use here has been limited to non-embedded structures. In embedded structures, their use would be redundant since the specification of the relevant complementizers in deep structure, (cf 4.3) provides all the necessary and sufficient information about the type of structure embedded. The Dummy symbol, is generally deleted after it has triggered the relevant T-rule. In terms of the deep structure sentence modes which this analysis entails, the process may be seen as another modification of the Aspects theory.

(vii) Conditional Constructions

In .2.0. (pp 279 ff) we treat Igbo conditional constructions with respect to Emotive predicate complementation. Of the two sub-categories of conditional constructions examined, only one sub-category - the Open Conditional Constructions - is involved here. It is only in this sub-category that the frozen expression $\text{Á síí} / \text{Yá' wúry}$ (if) can be optionally deleted; it is also here that the complementizer na may be deleted provided that the tense constraint (cf 299) is satisfied.

Because of the semantic equivalence of the pairs of variants, it is necessary to postulate one underlying structure for all open conditional constructions in Igbo, and thus show that surface differences are due to the optional deletions in question; examples 53 (a-k pp.299-300) illustrate this fact.

On pages 314-16 , we have argued a case for the transformational relationship which we establish between the following pairs of sentences which have paraphrase relationship:

2(a) Yá' wuru mà mádhyé mévọọ ọnwé ya n' ọ́hà, Ọ́ jọgburu onwe yā.

If a man should disgrace himself in public, it is very bad.

2(b) Mádhyé ímévọ onwe yā n' ọ́hà jọgburu onwe yā: For a man to disgrace himself in public is very bad.

We uphold the constraint (suggested by Katz & Postal (1964) that transformations be meaning-preserving. For us, then, semantic equivalence is a necessary, though not sufficient condition for trying to establish a transformational relation between a pair of sentences. However, if we can establish a transformational relation between a pair of semantically equivalent sentences using one or more of the well-established transformational process, we feel justified to do so provided that our method is systematic and devoid of tinkering. This is what we have done with regard to sentences like 2(a) & (b) (cf pp.304-9).

It has to be recalled that Igbo is an entirely different language from English, and that the aim of this research is not to produce an analysis which is a mere translation of English grammar into the Igbo language. The two languages differ, and so must their respective analyses. Expectedly, Igbo conditional constructions differ from their English counterparts, and their analysis must not be judged against the background of English.

The analysis presented here is the first attempt, to our knowledge, to apply the transformational generative model to the process of complex sentence formation in Igbo. It may, therefore, have all the shortcomings of a pioneer work. But even when alternative analyses are suggested in future, it is thought that ours is likely to remain a viable alternative. It is only by giving an accurate analysis of the linguistic data in the description of such non-Indo-European languages as Igbo that one can hope to make some contribution to linguistic theory.

Lyons (1970) summarises this transformational generative model thus: "As described in Aspects, the grammar of a language (and grammar must be taken in its widest sense) consists of three sets of rules: Syntactic, Semantic and Phonological. The syntactic rules generate the sentences of the language assigning to each both an underlying Phrase Marker and a derived Phrase-Marker. The meaning of the sentence is derived (mainly, if not wholly) from its deep structure by means of semantic rules of interpretation; and the phonetic realisation of the sentence derived from its surface structure by means of Phonological rules" (p. 124).

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- 1 For a full discussion of the inadequacies of the Aspects theory and proposals to remedy them, see Chomsky (1972) STUDIES ON SEMANTICS IN GENERATIVE GRAMMAR, Mouton, The Hague. The three essays that make up this book are concerned with the status of deep structure in a transformation grammar, as well as the problem of semantic interpretation. The essays reach the conclusion that a level of deep structure in the sense of the Aspects theory must be postulated, and that such aspects of meaning as cannot be determined from deep structure must be accounted for by late rules of semantic interpretation.

The syntactic component of this grammar is made up of three sets of rules, namely

- (i) Base Rules
- (ii) Lexical Insertion Rules and
- (iii) Transformational (T-) Rules

4.0.1 Base Rules

The base rules together with the lexicon (to be discussed in 4.0.3) form the base of the grammar which is itself a sub-component of the syntactic component. There are two kinds of base rules:

- (i) The Phrase structure (PS-) Rules and
- (ii) Rules forming complex symbols (CS) on major lexical items.

PS-Rules or Branching Rules are of the form

$$A \longrightarrow XBY$$

where X and Y may be null. If null, the rules are context-free (cf). If, however, they are non-null, the rules are context-sensitive (cs), and the above rule means: rewrite A as B whenever it is preceded by X and followed by Y. All our PS-rules are of the context free type.

4.0.2 Rules forming Complex Symbol on Major Lexical Categories

Rules forming complex symbols on major lexical categories N, and Det (though Det is not a major lexical category) are not ordinary PS-rules but elementary T-rules of some sort, or 'local transformations' (Chomsky 1965 pp. 98-99). There are two types of rule forming CS on major lexical categories. First, we have the context free rules which introduce inherent features such as

$$[+ \text{Animate}], \quad [+ \text{Count}] \quad \text{et cetera.}$$

The second kind of rules are context-sensitive, and they are of two types

- (i) Strict sub-categorisation rules, and
- (ii) Selectional restriction rules.

Strict-subcategorisation rules are of the form

$$A \longrightarrow CS \quad / \quad Z - W$$

where "A stands for any symbol ready for re-writing through strict sub-categorisation rules, such as N or V. CS stands for any partial matrix in the CS of a lexical entry of the form +A, +X-Z "

(Seuren 1969 p.41) Z and W are complex, perhaps nullstrings acting as context restriction, and ZAW is some X category symbol that appears on the left in the rule $X \longrightarrow ZAW$ that introduces A.

In concrete terms, then, if A is a verb, then only the VP which in this case substitutes for X determines the strict subcategorisation of A.

If, however, A is an N, then the strict subcategorisation of A is determined by frames dominated by NP.

Selectional Restriction rules "subcategorise a lexical category in terms of syntactic features that appear in specified positions in the sentence; they are of the form

$$+A \longrightarrow CS/\alpha\beta$$

where α & β are variables ranging over a set of specified features.

Thus, if +A is +V and α is N, and β is also N, then the rules abbreviated by the above schemata state simply that each feature of the preceding and following noun is assigned to the verb and determines an appropriate selectional subclassification of it" (Chomsky 1965 p.97).

Selectional Restrictions have come under severe criticism from generative semanticists. For example, Mc Cawley (1970) argues that

- (i) Selectional restrictions have no independent status in linguistics, whereas Chomsky (1965) employs them as a form of constraint on deep structure which, for generative semanticists, is not a clearly defined level as it is in Aspects;
- (ii) Selectional restrictions are predictable from the meaning of the lexical items in question;
- (iii) Many of the so-called selectional violations do, in fact, correspond to "possible messages" in possible worlds.

Mc Cawley, therefore, concludes, rightly it seems, that the deviance of sentences arising from the violation of the so-called selectional

restrictions is in fact a consequence of extra-linguistic factors in the context of situation. (Mc Cawley 1970 pp 166-168). If selectional restrictions are seen as the semantic property of lexical items, then the need to analyse them as a syntactic constraint will cease to exist. It happens that certain property or features of lexical items may have certain syntactic reflexes. For example, the application of Equi-NP deletion happens to be sensitive to the specific property of certain verbs being forward-looking. This is a semantic property which has corresponding syntactic reflex. Kempson (1973) argues along similar lines in a University of London Ph.D. thesis (p.8).

4.0.3 The Lexicon

The Lexicon in a transformational grammar "is a set of lexical entries, each lexical entry being a pair (D,C), where D is a phonological distinctive feature Matrix 'spelling' a certain lexical feature, and C is a collection of specified syntactic features, a complex symbol" (Chomsky 1965 p.84). In addition to phonological and syntactic features, the lexicon will also contain the following information:

- (a) features peculiar to a formative which can trigger a transformation or block it;
- (b) relevant features for semantic interpretation

In our sample lexicon, we are primarily concerned with syntactic and semantic features.

4.0.4 Lexical Insertion Rules

The PS rules generate strings consisting of grammatical formatives (for example, past, C et cetera. To derive a terminal string from preterminal strings, a lexical insertion rule of the following kind is required:

"If Q is a complex symbol of a preterminal string, and (D,C) is a lexical entry, where C is not distinct from Q, then Q can be replaced by D" (Chomsky op. cit. p. 84).

This rule permits lexical items from the lexicon to be inserted into the

preterminal string generated by the PS-and subcategorisation rules 'if the markers in the lexicon for that item and the markers in the complex symbol under the particular node do not conflict'. (Grinder and Elgin 1973 p.129). As Seuren (1969 p.38) observes "one notices that this lexical rule is not so much a rule as a rule schema: it is a cover formula for a large number of individual rules, each of which would apply to a particular complex symbol and a particular lexical item." The formal abstract structure generated by the base rules plus lexical insertion constitute the deep structure of a sentence and may be represented in the form of a tree.

4.0.5 Transformational Rules (T-rules)

T-rules, like PS-rules, are re-write rules. But they differ from PS-rules in certain essential respects, for while "PS-rules operate on single symbols without being able to take into account any other symbols from which they have been previously re-written, (their derivational history), T-rules operate on P-markers", (Seuren 1969 pp.29-30) generated by the base rules and lexical insertion rules, changing these P-markers into 'derived P-markers. A surface P-marker is generated when no more transformations need apply to a P-marker. Stockwell et al (1973 p.14) give an adequate account of T-rules, which is quoted in part below:

"Transformational (T-) rules change underlying P-markers into derived P-markers. That is, the rules effect a restructuring of trees.

Each T-rule consists of

- (i) a structure Index/Description (S1)/(SD)
- (ii) " " change (SC)
- (iii) " set of conditions.

The SD/S1 indicates the set of P-markers to which the transformation can apply, hence it is stated in terms of PS-symbols (eg #, NP, Det. etc), syntactic features (eg + def , + loc etc), morphemes, and a variable X, which stands for an arbitrary string of symbols.

The SC indicates the restructuring which the T effects."

Transformational operations include, among other things, such elementary operation as Deletion, Substitution, Adjunction and Permutation.

A Sister Adjunction rule, for example, can be formulated as follows:

SD X A B C Y
 1 2 3 4 5

Process: Attach 2 as the right sister of 4

SC : 1 $\not\vee$ 3 4 + 2 5

Condition: (specified)

where X and & are variables, possibly null,

XABCY, an underlying P-marker, and conditions,

if any, specified.

The output or derived P-marker will be XBCAY. Thus, a transformation defines a relationship between a pair of successive P-markers by altering the underlying or sub-sequent P-marker in one way or another.

Optional/Obligatory Rules

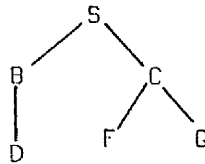
Transformational rules are either optional or obligatory. Optional transformations may or may not apply even though the relevant structural description has been met, but an obligatory transformation must apply once its structural description has been met and relevant condition/conditions satisfied. An obligatory T-rule may, however, be blocked where the deep structure is ill-formed, or underlies no sentence of the language under description. This is done by means of deep structure constraints (cf 4.0.7). In this way, a transformation may act as a 'filter' to ensure well-formedness, (Chomsky 1965, p. 139).

4.0.6 Explanation of Linguistic Terms

(i) Derivation: Where Ps-rules are applied sequentially, a derivation results, as in

<u>PS-Rules</u>			<u>Derivation</u>
S	→	B C	S
B	→	$\left\{ \begin{array}{l} D \\ E \end{array} \right\}$	B C
C	→	F (G)	D C
			D F G

(ii) Tree Any derivation is convertible into a tree as in



or

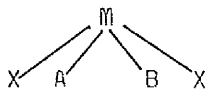
(iii) Labelled Bracketing as in $S \left[B \left[D \right] C \left[F \ G \right] \right]$

Trees have been used here for illustrative purposes only, while labelled bracketing is used in the structural description of transformation.

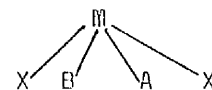
(iv) Dominance: A string of symbols which is uniquely traceable to a single symbol X is an X . Thus, in (ii) $F \ G$ is a C , and BC is an S . In (ii), D , F , & G are strings in an S , therefore they are said to be dominated by or under the dominance of S . Because there is no intermediate symbol between S and $B \ \& \ C$, $B \ \& \ C$ are said to be immediately dominated by S .

Within structures of immediate dominance, there are four particular relations which have been used here. "A is left (right) sister of B if both A and B are immediately dominated by the same node and if A is left (right) of B, there being no node in between them, viz:

(v) Left Sister

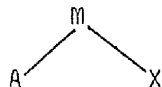


Right Sister

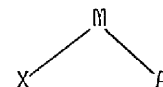


A is left (right) daughter of M if M immediately dominates A and there is no node dominated by M to the left (right) of A. Viz

(vi) Left Daughter



Right Daughter



(Stockwell et al 1973 p.13)

4.0.7 Deep and Surface Structure Constraints

Perlmutter (1971, p.XI) has shown that along with the T-rules, a grammar of a language can have an additional mechanism for getting rid

of ill-formed sentences. The mechanism is called deep structure (DS) and surface structure (SS) constraints. DS constraints are defined as "well-formedness conditions on generalised phrase markers that apply prior to the application of transformations and 'filter out' certain generalised phrase markers generated by the base as ill-formed". The need for such constraints, according to Perlmutter, is to be able to handle certain cases of ill-formed phrase markers generated by the base component, where such ill-formed P-markers cannot be characterised by the blocking of obligatory transformations. These constraints have not been found necessary in our analysis.

Surface structure constraints are also well-formedness conditions, not on deep structure, but on the output of the transformational sub-component which, together with the base, constitutes the syntactic component of grammar. We have had no need for these constraints.

4.0.8 Semantic and Phonological Components

These components are not central to the grammatical analysis presented in this thesis, consequently, we have not treated them in any detail. We do, however, devote chapter 3 to the discussion of tone and the tone rules that generate the various tone patterns required by different nominal construction types in the language. We do so because tone is the mediating factor between syntax and phonology, and certain tone rules in Igbo must refer to specific grammatical structures, though the tone rules themselves belong to Phonology, a fact which shows the inter-relationship of grammatical components.

The semantic component is interpretive in the sense that the rules of this component depend on the semantic specification of lexical items in the lexicon and the syntactic information provided by the underlying structure of a sentence, (cf Bierwisch 1969 & 1971).

The fact that this model distinguishes between two levels of deep structure and semantic representation marks the point of departure between interpretive syntax on the one hand and generative semantics on the other.

4.0.9 Interpretive Syntax Versus Generative Semantics

Generative semanticists (Mc Cawley, Lakoff and Postal and others) reject the now familiar dichotomy between deep structure and semantic representation; the question whether there is a level of deep structure distinct from semantic representation is for them a fundamental issue. For them, too, the mapping which relates surface structures to semantic representation is effected by one type of rule-derivational constraints - and grammatical transformations, essentially as defined in Extended standard theory, form but a subcase of these derivational constraints. One of the claims of generative semanticists is that semantic trees are not different in kind from syntactic trees.

It is, however, necessary to justify a level of syntactic deep structure from purely formal grounds without any recourse to semantics. For example, Chomsky (1969) has provided evidence that a syntactically defined concept of deep structure as in Aspects (1965) provides a natural account of the distinction between derived nominals such as destruction, belief, death etc. and the corresponding gerundive construction. He has shown that gerundives are sentential in origin, while derived nominals are not. Kempson (1973² pp.11-23) also argues for the maintenance of the distinction between syntax and semantics for the simple reason that "the constraints on syntactic structure are not co-extensive with those of semantics."

Within the generative semantics theory, lexical insertion can take place after the application of certain transformations, an aspect of the theory which makes it incompatible with Extended standard theory, for the

² A University of London Ph.D thesis which has been published by Cambridge University Press under the title Presupposition and the Delimitation of Semantics.

latter requires that all lexical insertion be pre-transformational.

As an example of pre-lexical transformation, Mc Cawley (1971) cites the rule of Predicates - Raising³ which creates complex predicates from elementary ones. Such a rule, it is claimed, produces kill from the following elementary predicates (cause (become (not alive))) and remind from (strike (similar)). It is the case that this rule does not produce in English derived verbs which are bimorphemic on inspection, although the output of the same rule is bimorphemic in some languages such as Japanese.

In Igbo, as in Japanese, there is a host of compound verbs which are clearly bimorphemic in structure, but whether they are the product of morphological lexical compounding or of Predicate-Raising remains an open question. However, there is yet a second category of compound verbs analysable as V-stem + suffix, an analysis which argues in favour of morphological/affixal derivation. Since the analysis of this category of compound verbs must be related to the analysis of V-stem + V-stem compound verbs in the same language, it seems that the over-all consideration of Igbo grammar would favour a derivational, morphological approach rather than the transformational analysis via Predicate-Raising.

The following are examples of the two categories of Igbo compound verbs:

(i) Compounds of two verb stems

- 1(a) $\acute{i}dh\bar{a}bh\grave{a}$ from $\acute{i}dh\grave{a}$ to fall
 'to fall into' and $\acute{i}bh\grave{a}$ to enter, get into
 (b) $\acute{i}bh\bar{a}dh\grave{a}$ from $\acute{i}bh\grave{a}$ hold, grab
 'to throw as in wrestle' and $\acute{i}dh\grave{a}$ to fall

3 For a detailed exposition of Predicate-Raising, see Mc Cawley 1971. "Prelexical Syntax" in Monograph 24.

Georgetown Series on Language and Linguistics, and Postal 1970. "On the Surface Verb 'Remind'" L1 1, pp. 37-120.

1(c)	íñúfè	from	íñú	to drink
	'to drink to excess'	and	ífe	to cross, pass, exceed
(d)	ímezù	from	íme	to do
	'to complete'	and	ízu	to be complete
(e)	ímehyè	from	íme	to do
	'to offend'	and	íhyè	to be wrong, crooked
(f)	ílòdu	from	ílo	to return
	'to arrive'	and	ídu	" reach, arrive

(ii) Compounds of a Verb stem + Suffix

2(a)	íbhàta	from	íbhà	+ -ta	suffix
	'to get into, enter'				
(b)	ímeche	from	íme	+ -cha	suffix
	to finish doing, conclude				
(c)	ígāfu	from	ígā	+ -fu	suffix
	to be able to go				
(d)	ímēwe	from	ímē	+ -wa	suffix
	to start doing, commence				

Throughout this thesis, we have maintained the existence of a deep level of analysis distinct from semantic representation, a level where categorial relation and order of constituents are given along with information necessary for semantic interpretation which cannot be predicted from other elements of structure nor accounted for by late rules of semantics, as suggested by Chomsky (1972). One such item is the complementizer, the deep structure specification of which is justified in 4.3. Thus, the data have always shaped the analysis, and no attempt has been made at any stage to force Igbo language data into a descriptive mould that may not necessarily fit it.

4.1.0 Categories of Igbo NP Complements: The Nā Indicative Complements

The following Igbo sentences contain instances of structures traditionally described as Noun clauses and phrases, collectively referred to

here as Noun Phrase (NP) Sentential Complements:

- 3(a) Ógù gwara anyí (sí) nà ulé gàwú eci

Ogu told us saying that exam will be tomorrow:

Ogu informed us that the examination would take place tomorrow.

- (b) Njókū kwùru (sí) nà áhya āgachaala

Njoku said (saying) that market go complete have:

Njoku said that people had all gone to market.

- (c) Umūmghotò tiri mkpu si nà ala arúola

The young unmarried girls shouted shout saying that land has defiled.

The young unmarried girls shouted out that the land had been desecrated.

- (d) Ózhi oma kwùru (sí) nà íhwúnanya dī mkpà n'etiti umūmādhù

Gospel says (saying) that love is important in midst of people:

The gospel says that love is necessary among men.

- (e) Nà nshi { jì } egbú mādihù were ánya.
 { nà }

That poison does kill person accustoms eyes.

That poison kills is obvious.

- (f) É yiri nà ónye ōwulà qa akwá amā n'Drùkwú

One scheduled that person who it be will clean road on Drukwu market:

It is scheduled that everybody will clean the roads on Drukwu market day.

- (g) Ékwere m nkhwà si agà m inūcha gqū ō dula eci.

Promised I promise saying will I drink finish medicine this reach

tomorrow: I promised to finish drinking this medicine by tomorrow.

- (h) Ō wère únù ánya nà ó wū onye oñyī

It accustom you(pl.) eyes that he is person of theft:

It is obvious to you that he is a thief.

- (i) Únu ma na nwáanyi áhī nwúru anwu?

You know that woman that died?

Do you know that that woman died?

(j) Ána m' ele' anyā na' o ga' abyá

Am I looking eye that he will come: I am expecting that
he will come.

(k) Ó wū hwe ihwere na' i na' eme' leèthi ubòci níile

It is thing of shame that you do make late day all:

It is shameful that you always come late.

(l) Ó wutere m' na' o wū onye aparí

It pains me that he is person of stupidity:

It pains me that he is an idiot.

(m) Ícòfùta na' o wuhí onye ezhi-okwū na' agbáwa m' obì

Finding out that he is not person of truth does break me heart:

Discovering that he is not an honest/truthful person causes me heart-
break.

In the foregoing examples, the NP sentential complements have been underlined. In all these examples, na' is the complementiser which may be optionally preceded by si', hence the above sub-heading - Na NP Complements. Although si' is an optional element in these examples, it can be used alone as the complementiser in place of na'. This is what happens in colloquial usage in this Ezinihitte dialect, as the following 4 show:

4(a) Ékwuru h́i si' unū wú nde mmegbu mād́hù

Said they saying you people are the ones of cheating people:

They said that you people are a dishonest lot.

(b) Ó tiri si' aya⁵ anwūona⁴

He shouted saying he has died: He shouted that he is dead.

(c) Ó cere si' am' nòrò yá

He thought that I was there

4 (4b) is a cry of indignation by a person who feels humiliated and helpless. 'Anwūonam' simply means 'I am dead or finished; if I were a man, I would not tolerate the situation.

5 The form of pronouns used in examples 4 & 5 is the emphatic form which is generally associated with reported speech.

4(d) Ǫ nùrù sí agì kwù na ndi gbāra yā àma

He heard that you are among those who betrayed him:

He heard that you were among those who betrayed him.

Compare the foregoing with the following examples which show varying degrees of colloquiality:

5(a) Ǫ kwùrù sí na áyà ga abyá (very formal)

(b) _____ na _____ (less ")

(c) _____ sí _____ (colloquial)

(d) _____ sá _____ (")

He said that he would come

The form of the pronoun in 5(d) is due to regressive assimilation which has been fully discussed in 2.2.1.

It is because sí is substitutable for na in the everyday usage of Ezinihitte speakers that a complementiser is rarely, if ever, optional in NP-complements in the dialect. The behaviour of the complementiser sí in Nà complements is typical of its behaviour in all other categories of NP-complements in the dialect: it can be substituted for any complementizers of dealect. This unique characteristic of sí will be examined in 4.1.5.

In this category of complements, there is no restriction whatsoever on the tense that can occur in the verb of the Nà clause. This is because the matrix (main clause) verbs involved here do not impose any tense constraints on the verb of the embedded complement sentence. Such matrix verbs include verbs of saying, hearing, thinking, feeling, fantasizing and declaring generally. These are verbs which state some facts about the speaker's knowledge of the world around him or make some claim about the truth or falsity of the propositional content of their complements. Nà complements have almost the status of independent sentences in the sense they make assertions and claims just like independent sentences without any restrictions on the form of their verb. It is for these reasons that Nà complements are described throughout this thesis as Indicative or Declarative complements.

The matrix verbs involved in indicative complementation have embedded under them sentences in which pronoun subjects are on high-tones if they are monosyllabic, or high-low tones, if they are disyllabic. The following examples illustrate this fact:

- 6(a) Íbè mewere nnà yá anya nà m wū onye na ēkpe ūdho
 (b) _____ í' _____
 (c) _____ ó' _____
 (d) _____ anyí wū ndi _____
 (e) _____ únú " " _____
 (f) _____ ĥi wū ndi _____
 (g) _____ úmú⁶ wū ndi _____

Ibe made accustomed father his eyes that I/you/he/she/etc be person who makes peace:

Ibe convinced his father that I am a person who makes peace.

you are _____

he/she is _____

we are people who make peace

you are people who make peace

they (inclusive) are people who make peace

they (non-inclusive) are people who make peace.

We shall contrast the tone patterns of these pronoun subjects in this complement type with their tone patterns in the next category of complements - the Interrogative (Yes/No Question) complements.

6 Two forms of third person plural pronoun have been used here to distinguish between the inclusive and non-inclusive meaning whenever a third person subject is present in the matrix (main) sentence. Thus, we have the inclusive form ĥi/ha and the non-inclusive form úmú, as in the following sentences:

- (a) Ógù sí ĥi gawa ngwañgwa
 Ogu said that they (including Ogu) should set out quickly.
 (b) Ógù sí umu gawa ngwañgwa
 Ogu said that they (excluding Ogu) should set out quickly.

4.1.1 Mā2 Interrogative (Embedded Yes/No Question) Complements

Now, let us examine the following examples with special attention to the tone patterns of the pronoun subjects of ma2 complements and the semantic properties of the matrix (main clause) predicates:

- 7(a) Ógù manì mǎ m̃ nwére eg'o mǎ mú enwěhii
 (b) _____ ì _____ í nwěhii
 (c) _____ ọ _____ ọ "
 (d) _____ ànyì _____ anyì enwěhii
 (e) _____ ùnú _____ únú "
 (f) _____ ńà _____ ńá "
 (g) _____ ùmù _____ úmù "

Ogu knows whether I have money or whether I have not:

Ogu knows whether or not I have money.

_____ you " "
 _____ he/she have money
 _____ we " "
 _____ you(pl) " "
 _____ they " "

- 8(a) Écéghekwe m̃ mǎ ùnú ga ejhé

Think am still I whether you will go: I am still wondering whether you will go.

- (b) Júọ yā mǎ Ógù nwúrú anwụ n'ezhi-okwū
 Ask him whether Ogu died in truth:
 Ask him whether Ogu actually died.

- (c) Gwá ānyì mǎ ńna gí wū onye nshì.
 Tell us whether father your is person of poison:
 Tell us whether your father is a poison maker.

In contrast to the examples of 6, all pronoun subjects in this complement type are on low tones. (We have deviated from our tone-marking

convention - which marks only the first of a sequence of tones on the same pitch - in order to emphasize the low-tone patterns of pronoun subjects in *mà* interrogative complements). Again, in contrast with the matrix verbs in *Nà* complements, all of which admit an optional *sí* morpheme, only a handful of *mà* interrogative complements do permit *sí* to precede *mà*. The verbs which may take a preceding *sí* before *mà* include:

<i>íjū</i>	to ask
<i>íçè</i>	to think
<i>íkpo</i>	to assume, wonder

Thus, we have the grammatical and acceptable sentences of 8(d-f) with or without *sí*.

8(d) *Ájūgha m (sí) mà ò nọ n'úra*
 Asking am I whether he is in sleep: I am asking
 whether he is asleep.

(e) *Éçèni ñhí (sí) mà ànyị wụ ndi ụjọ*
 Think they whether we are the ones of fear
 They are wondering whether we are cowards.

(f) *Í kpo (sí) mà m' wụ ebiri gí?*
 You think whether I am age mate of you?
 Are you wondering whether I am your age?

It is possible that there may be one or two more interrogative matrix verbs admitting of an optional *sí*, nevertheless, it is true to say that the great majority of them do not.

Igbo Equivalents of Embedded English wh- Questions

The following 9(a)-(f) contain the Igbo equivalents of English Wh- questions, they are embedded as NP and the relevant clauses have been underlined. They are not NP complements, but relative clauses, as we shall show in chapter 7 where this clause type is examined in detail.

- 9(a) Ibe gwara anyi' $\left\{ \begin{array}{l} \text{og'e} \\ \text{mgbu} \end{array} \right\}$ o qà abya'
 Ibe told us (the time) when he will come.
- (b) Anyi' kweshiri i'mā ebe o shī
 We ought to know place he come from:
 We ought to know from where he has come.
- (c) Kèdú hwe Ogū kwūru?
 What (is) thing Ogu said: What is it that Ogu said?
 What did Ogu say?
- (d) Gwá m̄ hwe oke riri
 Tell me thing rat ate: Tell me what the rat ate.
- (e) Ógè m̄ nwokhō jūchara m otho i dī
 Inlaw my male asked complete me manner you are:
 My father-in-law asked me how you are.
- (f) I' m̄ $\left\{ \begin{array}{l} \text{úzo} \\ \text{ótho} \end{array} \right\}$ m̄ jiri mée yā

You know way/manner I used do it: You know how I did it.

All that we want to point out at this stage is that the above underlined surface structures are relative clauses with nominal heads, rather than NP complements which they may appear on the surface.

4.1.2 Ka/mā Subjunctive Complements

This category of NP complements is characterised by the following underlined constructions:

- 10(a) Ácoro m̄ (sī) kā anyi qaa n'og'e
 Want I that we go in time:
 I want us to be in time.
- (b) Ógū coro $\left\{ \begin{array}{l} (sī) \\ \text{íri} \end{array} \right\}$ kā yā rie hwe faa thaa
 (c) $\left\{ \begin{array}{l} (sī) \\ \text{íri} \end{array} \right\}$ hwe " "
- Ogu wants that he (Ogu) eat thing early today:
 Ogu wants to have his meals early today.

Do you wish that I work today?

you(sg) _____

he/she _____

we _____

you (pl) _____

they _____

Observe that as with Nà complements, si' is an optional element with ka' or ma' in all the examples of 10, except (h) and (i) where the matrix (main clause) verbs are in the imperative mood. As a general rule, the optional si' is excluded from this type of construction whenever the matrix verb is in the imperative. Secondly, as in Nà complements si' can be substituted for either ka' or ma'. Here again, the same principle of stylistic variation can be invoked to account for the following:

- 12(a) Ácòrò . m sí' kà ányì lawá (very formal)
- (b) " kà (formal)
- (c) " { sí'
 sá' } (colloquial)

Want I that we start to go: I want us to start going.

Thirdly, ka' and ma' can be used interchangeably, except in 10 (a-c) where the matrix verbs are

ɪcɔ̌ - to want/wish, and
 ɪkhwɔ̌ - to intend, have regard for, have in mind.

In the dialect being described here, íco is marked for kà, while íkhwò takes mà, although in more complex constructions, such as 10(d-i) they are in free variation. The reason for their being in free variation in Igbo purpose construction will become obvious when the subjunctive complementation is described in detail in chapter 8.

Note also the tone pattern of pronoun subjects in 11(a-f): all pronoun subjects in this complement type are on high-tones in contrast to their low-tones in interrogative complements. Next, consider the semantic

properties of the matrix verbs involved in *kà/mà* complementation, for examples, verbs such as *íḱḱ* and *íḱhwò*. These are verbs which express desires and wishes, the realisation of which is an open question; consequently, such verbs do not make any assertions like the *Nà*-complement verbs; they do not ask for information, nor express doubt like *mà*-interrogative complement verbs. Because of these semantic properties, there is a dependency relationship between such verbs and the verbs of their sentential complements in the sense that the time expressed by the complement verbs can never be anything but future in relation to that of the main clause verb. Such matrix verbs are said to be verbs of forward-looking aspect, where the term, forward-looking aspect, is used to describe inter-clause time relationship. For example, in the following 13, the form and time meaning of the *kà*-complement verb do not vary, although those of the matrix verb do vary:

13(a) *Ánà m akwádo kà ányì ga(a) ahyā*
 Am I preparing so that we go market:

I am preparing for us to go to market.

(b) *Ágè m akwádo kà ányì ga(a) ahyā.*

Shall I prepare that we go market: I shall prepare
 for us to go to market.

(c) *Ánàara m akwádo kà ányì ga(a) ahyā*

(d) *Ákwádole m " " " "*

I was preparing for us to go to market

I have prepared

Whatever the time expressed by the main clause verb, the form of the verb of the *kà* complement is invariable, and its time is always determined from that of the main clause. We describe this complement type as the subjunctive, where subjunctive (+ subjunctive) means

- indicative
- interrogative
- imperative

We have already observed that the matrix verbs in 10(a-d) - ícõ and íkhwõ are complementizable predicates, that is, predicates which can take NP-sentential complements. But in the rest of the data we have such verbs

as	ínyē	(10 e)	to give
	ímē	(10 f)	to do
	ígã	(10 g)	to go
	íbyā	(10 h)	to come
	ígushikhe	(10 i)	to study hard

The verbs are not complement-taking predicates in Igbo, yet in these examples, they seem to function as complementizable predicates. This calls for some explanation of the structure underlying such sentences as 10(e-i) because their superficial form hides their true nature. Our investigation shows that the verbs to which the kã/mã clauses are complements in these examples have been optionally deleted. What these verbs are, their semantic and syntactic properties and their optionality in surface structures are discussed in 9.1.0.

4.1.3 Sĩ Imperative Complements

This is the last and smallest (in scope) category of NP-complements in Igbo, and needs only a brief discussion at this stage. Consider the following as examples of sĩ complements:

14(a) Ṓ kàrà sĩ anyị lāwá

He said saying we start go: He said that we should go away.

(b) Ōgù tíkìshiri sĩ umùákā mèchie onū

Ogu shouted out saying children close mouth:

Ogu shouted at the children to stop talking.

(c) Fáda sīrī anyị lāwá

The priest said we go away: The priest ordered us to go away.

(d) Ṓ sīrī anyị richee hwẽ byà ílāwani

He told us eat finish thing come start going:

He told us to finish eating before going.

14(e) Ó kwùuru únù fáá sí unù ñétùó

He said to you early saying you hide: He told you in time to hide.

14(a-e) highlight the specialised function of sí as the exclusive marker of embedded imperative sentences. In this function, sí is mutually exclusive with Nà, kà/mà and mà interrogative, and the deviance of the following 15(a) is due to a violation of the above constraint.

15(a) Ó tiwere sí nà anyị lāwá

(b) " sí anyị lāwá

He shouted that we should go.

Apart from the violation of the above constraint, it should also be pointed out that Igbo verbs have their imperative division or mood which is formally distinct thus:

Affirmative

Negative

16(a) Ríe : eat (vb cl.1)

Érìle : Don't eat

(b) Fùò : go out (" " 2)

Áfùla : Don't go out

(c) Byáá : come (" " 3)

Ábyàla : Don't come

These imperative forms can be introduced only by the complementizer sí the status of which is soon to be examined in the following section 4.2.0.

That it is possible in Igbo to embed an imperative sentence in the structure of an NP is due to the nature of the complementizer itself.

4.1.4 Igbo Complementizer morphemes

From the data so far examined, and others which we shall see in the course of this analysis, the following complementizers are functional in Igbo Noun phrase sentential complementation, they are set out in the following table for ease of reference:

Complementizers (Comp.)	Mood of Embedded S
<div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 10px;">(sì)</div> <div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 10px;"> <div style="text-align: center;"> sì' { ka' ma'₁ } ma'₂ na' </div> </div> </div>	+ S - Imperative + S - Subjunctive + S - Interrogative + S - Indicative where + Indicative = - Imperative - Subjunctive - Interrogative

From the above table, it will be observed that Igbo complementizers correspond each to a sentence type-mood. The table also highlights the exclusive function of sì above as the sole complementizer to imperative complements, as well as its optional presence before the others.

The term, mood, has been used here in its traditional sense. For example, the imperative mood belongs to commands and orders, the interrogative mood is associated with questions, the indicative/declarative mood with declarative sentences. It thus follows that the imperative and interrogative moods belong to non-declarative sentences, while the indicative mood belongs to declarative sentences. The subjunctive mood is not very easy to characterise, though it is definitely associated with non-declarative sentences, and in this regard belongs to the same class as the imperative and interrogative moods. But whereas the imperative and interrogative moods, like the indicative, are associated with independent and dependent sentences, the subjunctive mood seems to be associated only with dependent (embedded) sentences. The following are illustrative examples:

The Interrogative Mood

- 17(a) Ógù ò nọ n'úlo? (Independent Clause)

Ogu he is at home?: Is Ogu at home?

- (b) Ácòrọ m ímā mà Ógù (ọ)nọ n'úlo (Dependent Clause)

Want I to know if Ogu he is at home:

I want to know whether (or not) Ogu is at home.

The Imperative Mood

- 18(a) Unù fuọ tupu mu asháá anyā (Independent Clause)

You go out before I open eyes: You go out before I open my eyes.

- (b) Ọ sí unù fuọ tupu ya asháá anyā (Dependent Clause)

He says you go out before he opens eyes: He orders you to go out before he opens his eyes.

The Indicative Mood

- 19(a) Ala ọrũ nnà há fùghara há ụkà (Independent Clause)

Land of farm father their coming out for them trouble: Their father's land is causing some misunderstanding among them.

- (b) Ọnye ọwụla mà na ala ọrũ nnà há fùghara há ụkà.

Everybody knows that their father's land is causing some misunderstanding among them.

It will be observed from these examples that Noun phrase complementation is a structure-preserving⁷ process in the sense that the process of embedding independent sentences as NP-complements does not alter their form, except for such pronoun changes as from mú 'I' in 18(a) to ya 'he' in 18(b). Apart from this morpheme change which becomes necessary in indirect (as opposed to direct) speech, word-order and the diagnostic tone pattern of the sentence

⁷ This term was originally used by Emonds (1972) in a different sense from its use here. Emonds "structure-preserving constraint essentially specifies that constituents cannot be moved into certain structural configurations". See Stanley Peters(ed)(1972) Goals of Linguistic Theory, page 22.

types remain the same in both the independent and dependent clauses.

But with the subjunctive mood, the situation is different. Unlike the above three types of mood, the subjunctive mood does not exist, it seems, independent of the purpose and allied constructions with which it is closely associated. Admittedly, Igbo abounds in the following type of constructions:

20(a) Ka` cí' foo

Wish day break: Good night

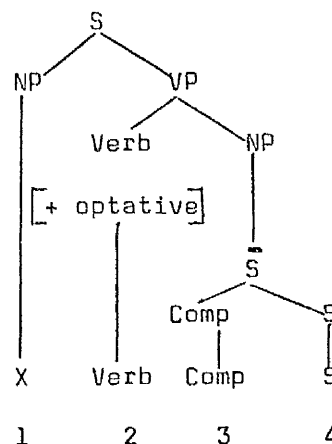
(b) Ka` émesia

Wish one finish: Goodbye, see you later.

(c) Ka` ányị kweere yā

Wish we greet him/her: Let us greet him/her.

One might argue that 20(a-c) are independent clauses; if they are, then the presence of the complementizer ka in such independent clauses is odd. It is, at least, an isolated and, therefore, a curious situation that a subordinating conjunction should be sentence-initial. No other subordinating conjunction in the language behaves this way. But if these examples and all other Igbo constructions like them are analysed as subordinate clauses (an approach which we favour) then the presence of ka as the marker of the subjunctive mood along with the tone pattern of the ka clause can be accounted for on syntactic (transformational) grounds. For example, it could be argued that sentences such as 20(a-c) represent a reduced form of more complex underlying structures (Fig 1) whose superordinate (main) clause has been deleted thus:



SC : ∅ ∅ 3 4

Condition: 2 must be an
optative verb

Fig 1.

This analysis is in keeping with the transformational rule of optative Predicate deletion which we give in 8.1.0 p.412. Robin Lakoff (1968) argues for a similar analysis when she tries to reconcile the so-called independent subjunctive constructions in Latin, which she shows to be clauses dependent on some abstract verbs of wish. She extends the same analysis to English purpose constructions. The presence of the *kà* conjunction in the above examples can be accounted for as the reflex of the subjunctive mood of a clause embedded as the direct object of a verb of wish. This analysis thus enables one to explain why *kà* is the formal distinction in Igbo between a command and a wish or between an order and a polite request as in 21(a) and (b).

21(a) Ányi jhee ahyã : a command

We go market: We should go to market; Let's go to
market.

[illegible]

The former has a greater imperative force than the latter.

From the foregoing account, we maintain the view that the subjunctive mood, unlike the others - the indicative, the interrogative and the imperative, is associated only with dependent clauses, in other words, it has a different status from these others.

4.1.5 The Si' Complementizer - its status

Consider the function of si in the following examples:

22(a) Jéso kwuru si: "Onye cōrō inwē ndhù ébèèbè ga aháfù ñwé
Jesus talked said: person who wants to have life everlasting will leave
niile o nwèrè ñowé m
things all he has (and) follow me.
Jesus talked and said "whoever wants eternal life will abandon all
his wealth and follow me".

22(b) Anyi na amá iwu si: "Úmù-nwáànyị ga náà ázà

We are making law saying: Women will keep sweeping
 Ụlò ókpere nà sọtàdée nííle"

house of prayers on Saturdays all

We are making it a law that women shall keep sweeping the church
 every Saturday.

(c) O kara si: "Únú gaa' ebeke Bishọpụ"

He talked saying "You go place of Bishop:

" " " "You, people, go to the bishop's house"

In 22(a-c) the actual words of the speaker are in quotes. In these examples, si is consistently the second of two verbs of saying in a serial construction. If we wish to make the quotations reportitive, all we need do is change the relevant personal pronouns into the appropriate person, and the imperative mood of the verb in the now reported speech remains unaffected. For example, 22(a) & (c) will become 22(d) & (e) respectively:

22(d) Jéso kwuru si' onye cōrō inwē ndhù ébèbe ga aháfù hwe'
 nííle o nwèrè sowé yā:

Jesus said that whoever wants eternal life will abandon all his
 wealth and follow him.

(e) Ókara si' ña gaa' ebeke bishọpụ

He said that they should go to the bishop's house.

The use of any other complementizer, say, na, will render these
 examples deviant and unacceptable:

(f) *Ókara (si) na' ña gaa' ebeke bishọpụ

* " " ka' " " " "

The imperative form of the verb - gaa', for example - can co-occur
 only with the complementizer si.

Now, consider the following:

23(a) Jụo yā { si } ò ga abya'

(b)

sò⁸

(c)

mà

: Ask him whether he will come

8 This form so is due to regressive assimilation.

- 23(d) Ájū̀la ya { si } ò ga abyá'
 (e) sò
 (f) mà

Ask not him whether he will come: Don't ask him if he will come.

In 20(a-f) the main clause verb *iju* - is in the imperative mood, and so is si. Similarly, in 22(a-e), si is the second of two verbs of saying in a serial construction, and can thus be considered to be in the Narrative form. Recall that in an Igbo serial construction, only the first verb of ~~this~~ series bears the tense/aspect marker, leaving the following verbs to copy their tense from the preceding one. Because the verb si always comes second in the type of sentences being considered here, it will always be suffixless for the foregoing reason, and consequently, its mood must be determined in context thus:

- 24(a) 0' si ya bya' (si' Indicative)

He is saying he come: He is asking him to come.

- (b) Si' ya' bya' (si Imperative)

Say he come: Tell him to come.

- (c) 0 tiwere si m qhata (si Narrative in a serial construction)

He shout started said I run up:

He started shouting for me to run up (to him).

Observe that in the sentences being considered here, only the verbs of saying are involved. Secondly, the verb isi is invariably the second of two such verbs, never the first. It is either used alone as in 24(d), or in second or third position according to the number of the preceding verbs of saying, as in (e)

- (d) ǫ́ si anyi lawá:

He is saying we go away: He is telling us to go away.

- (e) 0' tiwere, kpówa, si anyi: lawá

He started to shout started to yell said we go away: He started shouting and yelling at us to go away.

The function of si' as a complementizer owes its origin to the use of the verb in this type of serial construction. What seems probable is that with time this verb started to be used after verbs other than those of saying in a kind of serialised (verb) construction, which is one prolific method of co-ordination in Igbo. Further more, this verb isi introduces the actual words of the speaker, as though in quotes, necessary pronoun changes having been made. The unique function of si' as the sole complementizer to imperative NP-complements stems from this special character of the verb. In other words, two essential factors are responsible for this verb form being used as a kind of subordinating conjunction, viz: its fixed second/third position in a serial construction, never the first; secondly its ability to introduce the actual words of a speaker, and this is responsible for its being the only permissible marker of embedded imperative constructions. As we shall demonstrate in 7.2.0, si' as the imperative complementizer (or the second of two verbs of saying in a serial construction) is deletable from surface structure only if the first verb (i.e. the matrix verb) is isi itself. This deletion accounts for the form of 24(d) above.

Let us now relate the function of si' in the foregoing examples to its function in the following:

25(a) O' kwuru si' aya ga akp' m
na ya

He said that he will call me.

(b) Anuru m { si' } umu abyachaala
na }

I heard that they have all come.

(c) Hwe o fytara wu { si/sa } nde e wu nde mmegbu
na }

thing it comes to is that people these are people of cheating:

What it amounts to is that these people are a dishonest lot.

25(d) Ĩ hwūna { si̇
nà } ecēghe ĥĩ anyĩ?

Do you see that they are waiting for us?

(e) Ácòrò m { si̇
kà } ányĩ hafū ĥĩ

want I that we leave/pardon them: I want us to pardon/
leave them.

(f) Ékhwò m { si̇
mà } únu richefuo yā

Intend I that you eat be able it: I intend that you will
be able to finish (eating) it.

In all the above examples, si̇ and its variant forms are substitutable for any of the other complementizers - Nà, kà/mà, and mà₂ (that is mà interrogative), given the right matrix verb. Since all these forms have the same privilege of occurrence, they must all belong to the same form class. Our grammar must, therefore, show that si̇ the complementizer is associated with si̇ the verb. How to capture this relationship between certain Igbo predicates and certain function words is discussed in *chapter 10 in Appendix 1*

We must, however, point out one difference between the two complementizers Nà and si̇. This difference is brought out in the following examples:

26(a) Nà ó wū onye àparĩ were ánya.

That he is person of stupidity accustoms eye:

That he is an idiot is obvious.

(b) ?Sĩ ó wū onye àparĩ were ánya.

(same as 26(a)).

(c) Ónye àparĩ ó wū wère ánya.

Person of stupidity which he is is obvious: The fact that he is
an idiot is obvious.

26(a) is grammatical, though not very popular; its popular equivalent is 26(c)

But 26(b) is very questionable because the si' complementizer is sentence-initial. It seems to be the case that the two complementizers are in free variation only in clause-initial but not sentence-initial position.

Summary

Igbo complementizers constitute a set of mutually exclusive morphemes, each complementizer corresponding to a specific sentence type or mood viz - $Nà$ for the indicative, $kà$ and $mà_1$ for the subjunctive, $mà_2$ for the interrogative and si' for the imperative mood. Although si' may precede any of the others, or be substituted for it in colloquial usage, it is nevertheless the only permissible complementizer for embedded imperative construction. This specialised function of si' stems from the fact that it is associated with the verb isĩ 'to say' which permits the speaker's actual words, as if in quotes, as its NP object. From the point of view of mood, the subjunctive $kà$ & $mà_1$ complements stand in contrast with the other complement types, being the only mood which is restricted to dependent (embedded) clauses, whereas the rest are associated with independent as with dependent clauses. From the view point of meaning, $Nà$ complements contrast with the others including the subjunctive complements, since $Nà$ introduces declarative complements while the others introduce non-declarative ones; this explains why only $Nà$ complements can be factive, given that the relevant matrix predicate is one which entails the truth of its complement.

4.2. Igbo Base (PS-) Rules

$$1 \quad S \longrightarrow (Q) \left(\begin{Bmatrix} \text{Emph} \\ \text{Imp} \end{Bmatrix} \right) S (\text{Conj } S \text{ Conj } S \dots n) \quad \text{where } n \geq 2$$

The declarative sentence is taken to be the norm; it can be turned into a question or a command, emphasized or negated, hence the specification of the category symbols Q, Imp(erative) and Emph(asis) which trigger the relevant transformations. The category Neg(ative) has not been specified

here since it stands for a number of suffixes corresponding to various tenses/aspects in Igbo (cf 2.3.4). The use of the trigger Q in Igbo question formation (both Yes/No and Kédú Questions) is illustrated in chapter 6; that of Imp. in Imperative Complementation in chapter 7, while the T-rules⁹ triggered off by Emph. are incidentally illustrated in the Appendix (10.4.3). Note that Q and Imp. may co-occur in this language.

2. S → NP VP
- 3 VP → (Aux) Verb($\left\{ \begin{array}{l} \text{Interrog.} \\ \text{NP} \\ \text{Prep. Phr.} \end{array} \right\}$) (NP) (Reason) (Manner) (Time)
(Place) (Adv).

Ps-rule 2 states that every Igbo sentence is composed of a subject (NP) and a predicate phrase (VP), while PS-rule 3 indicates that VP consists of an obligatory element, the verb, and a number of other optional elements (in parentheses) selected according to a number of semantic and syntactic considerations. The element, Aux, is the first element of a compound verb directly dominated by VP and it is always deleted whenever such compound verb are infinitivized.¹⁰

- 4 Verb → (Prefix) + V-(stem) + suffix + (compl.)

Observe from the above rule 4 that verb consists of the verb-stem, the inflectional affixes (prefix and suffixes), plus a complement, which is optional. The justification for this analysis lies in the fact that Igbo is full of verbs whose citation form is incomplete without an inherent object which specifies the meaning; these include

ítū	anya	'to expect'
"	onu	to burrow
"	mai	to pour libation

9 See also Carrell (1970) pp.48-49 for more illustration of emphatic sentences in Igbo.

10 Infinitivization involving a compound verb in Igbo, ie, an aux + verb, is discussed in 5.2 and 6.4 respectively where it is shown that only the main verb bears the infinitive prefix I while the auxiliary is deleted as a consequence.

ítū ama 'to sweep road'

" n'anya '" surprise'

íche ékpe to beg/ask for pardon

Although these verbs obligatorily take an inherent object in order to specify their meaning, they also take other objects, if they are transitive, thus:

27(a) Ányĩ turu ánya gĩ eci gāra āga
We expected you day that past:

We expected you yesterday.

(b) Ya' chēere gĩ ékpe

He beg you beg: Let him ask for your pardon.

From these examples, it will be observed that for some of these verbs the object comes after the inherent complement as in 27(a), for others, it intervenes between the neutral verb¹¹ and its inherent complement, as 27(b) shows.

The purpose of setting up a verb-complement string as a single unit is thus to give formal expression to the traditional distinction between nuclear elements, such as the above verb-complement string, and peripheral or non-nuclear ones, for instance, an adverbial modifier.

5 Verb → CS (a complex symbol)

Rule 5 is a rule schema in which the category symbol verb is sub-categorised in terms of the contexts in which it appears under the dominance of VP. For example, verbs taking sentential complements such as ícō will have the following entries:

¹¹ We have used the term, neutral, because items such as ítū, although they can be inflected like other Igbo verbs, lack any meaning until the relevant complement has been supplied. The relevant complement is thus the meaning-specifying element. We have also used 'inherent' rather than 'cognate' to describe these complements since they are not necessarily cognate with the neutral verb.

ico
 + V
 - aux
 + trans.
 + forward-looking
 + S~subjunct

- 6 NP $\longrightarrow \left\{ \begin{array}{l} N \quad S \\ \text{Nom} \end{array} \right\}$
 7 S \longrightarrow Comp S
 8 Nom \longrightarrow N (N) (Num.) (Quant.) (Det.) (S).
 9 N \longrightarrow CS

PS-rules 6-8 are similar to those given by Carrell (1970, p. 18-19), but they avoid the rather confusing intermediate stage between the category Nom (her rule 2.17) and N as a member of this category (her rule 2.19). There seems to be no need for the intermediate rule 2.18 which expands Nom as $\text{Nom} \longrightarrow \text{Nominal} \quad (\text{Det}) \quad (\# S)$. It is sufficient to show that Nom(inal) is a syntactic category with the constituent structure shown by rule 8 above, and that N is one of those constituents and a complex symbol (CS). However, the advantage of rules 6-8 lies in the fact that they provide a necessary distinction in Igbo between two types of NP.

(i) a sentential complement of the structure

N Comp S

$\left[\begin{array}{l} + \text{ pro} \\ + \text{ def} \\ + \text{ abs} \\ - \text{ loc} \end{array} \right]$

ya'

and

- (b) a (complex) Nominal which is the domain of relative clauses and other deictic elements such as Numerals, quantifiers, and determiners.

As with the strict subcategorisation of verbs, nouns are subclassified by rule schema 9 in terms of the contexts in which they occur. Thus nouns (nominals) like

óma¹²

ójòò

óh̃wùò

in addition to having the feature +N, will also be marked for the following:

+ N

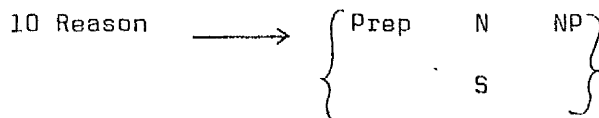
+ attrib.

+ 2nd position

to show that they never occur alone, but as a sort of attributive adjective to a preceding nominal.

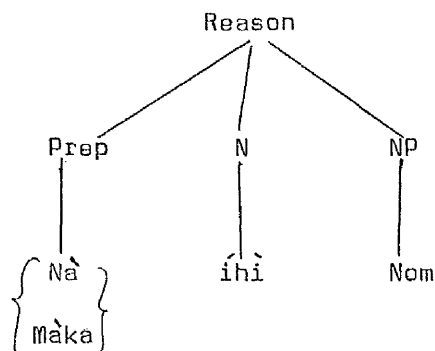
12 Lexical items such as these are classified as adjectives by scholars of the Igbo language, notably Green and Igwe (1963) and Dr Igwe (1974). There is no denying the fact that they translate the English adjectives, good, bad and new. But there are thousand and one other nouns which also translate English adjectives, and which never occur alone, though they can be in first or second position in a nominal construction. Given this situation, and the absence of any diagnostic syntactic or morphological criteria for adjectives in Igbo, we suggest a neutral term, nominal, for these items and all well-established nouns of the language. It is the task of the grammarian to determine which of these nominals can function alone as NP, which must require another nominal $\begin{bmatrix} N_1 & N_2 \end{bmatrix}_{NP}$, those with fixed

structural position, and those without fixed structural position. We have not considered a lexical category, Adjective a necessary pre-requisite for an accurate description of the Igbo language.



The above rule is as given by Carrell (1970, op. cit. pp.17-18).

There are two types of Reason or Purpose constructions in Igbo. The first is of the structure:



From the above figure, we get the following Igbo examples according to the items selected:

28(a) N'íhì nwókho àbúṓ:

For sake of males two: For the sake of the two men.

(b) N'íhì nnà ñá: For the sake of their father

(c) N'íhì ónye wā

Sake of person the: For the sake of the person

(about whom we have spoken)

(d) $\left\{ \begin{array}{l} \text{M̀aka} \\ \text{N'íhì} \end{array} \right\}$ mkpuru obì Ōsuagwŭ nwuru anwu

For the sake of soul of Osuagwu who died: For the soul of the deceased Osuagwu.

(e) M̀aka (íhì) gí: For your sake.

The second type of Reason or Purpose construction involves kà and m̀a₁ NP-complements as in the following 29.

29(a) Ábyàra m ka dọkita lee m anya n'ahú

Came I so that doctor looks me eye on body:

I came for the doctor to examine me.

29(b) É gbūdhàrà n'kwụ nde è ma ihwe bhata' n'ụlò

One cut down oil palm tree these so that light come in house:
These oil palm trees were felled in order to let in light to
the house.

(c) Ónyèrè ñha oce kà ñha' kpòrúo

He gave them seats that they sit down: He gave them
seats to sit down.

Purpose Clauses in Subjunctive complementation is the subject of chapter 8 where the structure underlying sentences such as 29(a-c) is examined in detail.

Thus, we have come across all the Ps-rules relevant to the formation of Igbo NP-sentential complements, the specific rules being Ps-rules 6, 7, and 10.

11 Manner $\longrightarrow \left\{ \begin{array}{l} \text{Prep. N} \\ \text{ótho} \end{array} \right\} S$

Igbo manner constructions involve either, simple manner adverbs such as nwáyọọ, ósiìsọ, ngwāngwa et cetera or

$\left\{ \begin{array}{l} \text{ótho} \\ \text{n'ụzọ} \end{array} \right\}$ plus relative clause

The following are illustrative examples

30(a) Ó nwūry $\left\{ \begin{array}{l} \text{otho} \\ \text{n'ụzọ} \end{array} \right\}$ tūry n'anya

He died in manner which strikes in eye: He died in a
mysterious/surprising manner.

(b) Ótho i mēre tọrọ m obi uto

Way you did sweetened me heart sweet: How you behaved/
What you did delighted me.

12 Place $\longrightarrow \left\{ \begin{array}{l} \text{Prep NP} \\ \text{yá} \end{array} \right\}$

Locative constructions in Igbo involve the preposition na and a
locative nominal:

Ps-rules 16-20 reveal that the category determiner, can be subclassified into two sets; demonstratives and definitizers according to their syntactic characteristics. In addition to their normal demonstrative function, the demonstratives may also be used as substantives:

32(a) Ọ́kpá eghū nde-ēhì' khúgburu onwe ńhā nà nkhub'

Type of goat those destroy kill self their in destruction.

Goats of that type can be very destructive.

(b) Hòtára m̄ ndi ọcha ańhì

Select for me the ones white those: Select those white ones for me.

In 32(a) above the determiners nde ēhì' are functioning as demonstratives, in 32(b), they are used as substantives. But definitizers, on the other hand, can only function as definitizers, never as substantives:

(c) Lèkwé ọ́kukò wá' nḡa ọ́ bhàta

Behold fowl the place it is coming in:

See the fowl (about which we have been talking) as it is coming in.

(d) Yá mā nwa gá nḡafū

He the (naughty) child will get lost travelling: That child will get lost travelling about.

(e) Gí' mā nwa wū onye ońhì

You this child are person of theft: You child, you are a rogue.

The definitizer wá' can be used only to refer to an object or person previously mentioned, and can be used to definitize either a noun or a pronoun. Má', on the other hand, can only be used after pronouns. The existence of these determiners should convince the reader that contrary to Carrell's observation (Carrell 1970 p.26) there is enough justification for the distinction into definite and indefinite determiners. The zero determiner is the indefinite one while a/āhì, 'this/that' and wá' constitute the definite determiners. A native speaker of Igbo will use one of these or any other dialect equivalent to convey the sense of the

definite, but none at all whenever an indefinite meaning is being conveyed.

21. Suffix \longrightarrow Inflect(ional) Non-inflect.
22. Inflect \longrightarrow Neg.
23. Non-inflectional¹³ \longrightarrow Assertive, benefactive, directional, inchoative et cetera.
24. Prefix \longrightarrow A-
- 24.1 Present Progressive \longrightarrow $\left\{ \begin{array}{l} -ghA \\ na + verb \end{array} \right\}$
- 24.2 Past Progressive \longrightarrow na + rV + verb
- 24.3 Simple Present \longrightarrow \emptyset
- 24.4 Past \longrightarrow -rV
- 24.5 Perfect \longrightarrow A- (0) + 1A' ~ nA'
- 24.6 Imperative \longrightarrow -0'
- 24.7 Habitual \longrightarrow $\left\{ \begin{array}{l} na \\ ji \end{array} \right\} + verb$
- 24.8 Future \longrightarrow ga + verb
- 24.9 Neg. $\left\{ \begin{array}{l} \text{Simple present} \\ \text{" past} \end{array} \right\}$ \longrightarrow A - ñII/ghI
- 24.10 Neg. Present Progressive \longrightarrow A - ñII/ghI
- 24.11 Neg. Past " \longrightarrow A + na + ñII/ghI + rV
- 24.12 " Perfect \longrightarrow A - bèle
- 24.13 Neg. Imperative \longrightarrow A - la ~ nA

13 For a very detailed study of non-inflectional suffixes in Igbo, see G. E. Igwe (1974) chapter 15.

In the negative conjugation of the verb, there are gaps because certain tense forms do not have corresponding negatives. But this gap is filled by the existence in Igbo of periphrastic negative expressions in which all tense/aspect forms can be expressed. These along with verb inflection in Igbo have been amply illustrated in chapter 2(2.3.1-4).

25.1	Assertive	→	-rV ₂
25.2	Benefactive	→	-rV ₃
25.3	Directional	→	-tA
25.4	Inchoative	→	-wA
26	Aux.	→	ínà, íjì, ígā
27	Comp.	→	sí, nà kà, mà ₁ , mà ₂
28	Prep.	→	Nà, màka, bhànyére, gbásara, shí(te)
29	Numeral	→	ótù, àbúṓ, àtṓ, ànnṓ et cetera
30	Quantifier	→	níìlè, dùm, ùzugbu, ótutù
31	Adv.	→	fáa, ọ̀sììsò, ńgwańgwa
32	Conj.	→	màna, thùmà, khàmà, sí, nà, kà, mà.
33	Interrogative	→	gírì/ònyé what/who
			òlía/anaa how
			òlé how many
			(nà) òléé - where

One hopes that the detailed analysis of various tense and aspect forms presented here and in chapter 2 will help to dispel the erroneous view that "the only tense indicators in Igbo are two auxiliary verbs (ínà and ígā) and a present perfect" (Carrell 1970 p.30). The past time suffix -rV has been very little understood by scholars of the Igbo language, except Green and Igwe (1963) who rightly distinguish between -rV time on the one hand, and -rV time non-time, on the other. Whereas there is only one -rV time, there is definitely more than one type of -rV non-time for example,

-rV benefactive and

-rV assertive

Although the benefactive morpheme can co-occur with most verbs, the *-rv* assertive is restricted to a semantic class of verbs which we describe tentatively as stative/existential verbs. These include

ínwē	to have, own
ibhà úrú	" be useful
íjò njo	" " bad
íma mma	" " good
íghē	" " cooked
írú	" " deformed

With these verbs and others belonging to the same semantic class, the *-rv* assertive morpheme is generally associated with present tense meaning thus:

- 33(a) Ógù nwéere eg'o
Ogu has money: Ogu is rich.
- (b) Ínwē moto bhara úrú
Owning a car is useful
- (c) Hwé' o mēre íjoro njo
Thing he did is bad: What he did is bad.
- (d) Nwátàkírì à mára mma nwáànyì
Young girl this is beautiful as woman
This young girl is as pretty as a woman ought to be.
- (e) Úkwu rūru yà .
Leg is deformed to him/her: His/her leg is deformed.
- (f) Ány ò ghére eghe
Meat this is cooked: This meat is well cooked.

Whenever a past time meaning is meant, there is a corresponding change in the form of the underlined verbs, as 34(a-f) show:

- 34(a) Ógù nwéere eg'o: Ogu used to have money
to be rich
- (b) Ínwē moto bhaara úrú (n'óg'è éhì)
Owning a car used to be useful (at that time)

34(c) Ájha ụlō ọ́ jóoro njò ilē anya tupu e mézhie yā

Walls of house this used to be bad to look at before one repaired it:

The walls of this house used to be ugly to look at until they were repaired.

(d) Nwátàkírì à máara mma nwáànyị túpu ya aryàwá'.

This young girl used to be a pretty woman before she became sick.

(e) Ụkwụ rūuru ya, mà o dīla yā mma gbuō.

His/her leg used to be deformed but it has become to him/her good now:

He used to be deformed, but now he is alright.

(f) Ányu ọ́hì ghéere eghe mgbu m fōdhàtara yá.

That meat was cooked when I brought down it:

The meat was cooked when I brought it down from the fire.

The vowel lengthening which is characteristic of these underlined verbs has been analysed by Green and Igwe (1963 p.76) as due to the presence of -rV time and -rV non-time in one and the same verb: "... when both these suffixes are present one of them is usually represented by an alternant, a vowel, which lengthens the vowel that precedes it. This reduplicating vowel suffix must not be confused with the open vowel suffix, which expands a close stem vowel and lengthens an open one and which we have never found with this verb form".

But Carrel (1970 p.29) did not recognise the above facts when she lumps such action verbs as:

íḡā to go and

íḡwū (ji) to dig up (yams)

together with members of the stative class and reaches the same conclusion as some of her predecessors¹⁴ that "this 'past tense' frequently refers to present time and that often an adverb of past time must be present if the sentence containing Assert is to have a past time meaning". In support of

14(i) Spencer, Julius (1901) An Elementary Grammar of the Igbo Language, London S.P.C.K

(ii) Adams, R.F.G. (1932) A Modern Igbo Grammar. London, Oxford University Press.

the above assertion Carrell quotes the following extracts from Adams (1932, p.51-3) "Thus plain ógwùru jí means 'he digs yams, it is a statement without qualification or doubt; and therefore does duty for the absolute form of the present tense. ógwùru jí means 'he dug yams' with any word denoting past or in answer to a question referring to the past." Not surprisingly, Carrell sticks to the above analysis on the grounds that "the data collected from my informants agree with what Adam says. ógwùru jí may mean either 'He digs yams', or 'He dug yams'."

It is difficult to imagine an Igbo dialect where the above Igbo sentence could have any other than the past tense meaning, the verb involved being an action predicate. Such an ambiguous time meaning is definitely ruled out in the Ezinihitte dialect which we are describing here. But the recognition of the existence of more than one **-rV** morpheme in Igbo: a **-rV** time (a one-member class) and a **-rV** non-time (a multiple-member class), and a study of their distributional characteristics will help to throw a lot more light on past and present meanings in Igbo inflection. What must be emphasized here is that with action verbs, a **-rV** suffix can only have a past time meaning. Thus,

(a) ógwùru jí can only mean

He dug some yams, while

(b) ógwùuru jí means

He dug some yams for himself.

where the duplication of the verb stem vowel indicates the presence of two morphemes

the **-rV** time and

the **-rV** non-time/benefactive, as in (c)

(c) óg na' egwúru otú jí

He is digging one yam for himself.

4.3 Defence of the Base Rules

A look at our base rules shows that they mark a departure from the base rules given in Aspects and all other transformational treatment of complementation based on that theory. In the base rules given here, complementizers are generated in deep structure. This departure constitutes a negation of the transformational hypothesis of complementizer-insertion and complementizer change as exemplified in the works of Rosenbaum (1967) and Robin Lakoff (1968). The specification of comp. as a deep structure node also implies that it is far from the semantically empty morpheme which existing accounts¹⁵ of complementation make it.

The claim that complementizers contribute to meaning has been strongly put forward by Bresnan (1970). Among other things, she asserts that "complementizer selection is the kind of phenomenon characteristic of subcategorisation, and in fact, some aspects of complementizer choice cannot even be described within the transformational hypothesis without extending it in undesirable ways," (Bresnan 1970 pp.306-310). She argues that unless comp. is introduced by base rules, certain conjoined sentences in English would not be derivable, whereas the specification of a deep structure comp. makes the derivation of such sentences from familiar rules easy. Lastly, she demonstrates that WH- is one of the English complementizer morphemes. We must observe here that in Igbo, there is no complementizer corresponding to the English WH-. The Igbo equivalents of English WH- questions, both in their embedded and non-embedded forms, are complex nominals with nominal heads and qualifying clauses. The justification for this claim is presented in chapter 6.

15(i) Sinha, A.S. (1970). University of York Ph.D. thesis on "Predicate Complement Studies in Hindi and English"

(ii) Bagari, Dauda, M. (1971) "NP complementation" in a University of London M.Phil. thesis.

Since this is not a comparative study, though comparison is at some stage inevitable, we shall restrict our attention to Igbo in order to show what evidence there is - syntactic and semantic - in support of the claim that complementizers must be generated in the base rules of this language.

Igbo is a tone language, sufficient evidence for this has been given in the introductory part of this thesis (cf 1.3 & 2.0.0).

To a large extent, then, the grammar of Igbo deals with sets of appropriate tone patterns required by various construction types in the language.

The extent, if any at all, to which intonation plays a part in meaning modification in a Tone Language such as Igbo is, to say the least, doubtful.

In view of the fact that Transformations as now formulated are meaning preserving¹⁶ the onus on Deep structure is to specify all the necessary information that contributes to meaning.

SYNTACTIC EVIDENCE

Igbo Complements fall into four mutually exclusive sets or categories based on the following syntactic parameters:

- (a) the complementizer morpheme present
- (b) matrix verb
- (c) the sentence type embedded as NP and
- (d) the semantic interpretation of the NP complement, and consequently of the whole sentence (matrix and embedded).

These four factors interact in so close a manner that it is difficult to discuss one of them without necessarily discussing the others. For example, the choice of the matrix predicate determines complementizer selection which in turn, determines the mood of the whole sentence. For those verbs which

16 It has been observed (Chomsky 1972) that such meaning changes as are due to Focus and Pseudo-Cleft rules can be accounted for by late rule of semantic interpretation. Such a solution to the problem assumes, of course the existence of a syntactic Deep structure distinct from Semantic Representation. The generative semantics position is that the Deep structure is semantic.

may take more than one complementizer, the choice of the complementizer is determined by the complement type. In other words, mood and complementizer choice are interdependent, and both of them affect meaning.

For example, (sɪ́) Nà introduces what we have described as Declarative/Indicative complements - that is, those complements which are neither Interrogative, nor Imperative nor Subjunctive in their mood (cf. 4.1.4). In this complement type, Pronoun subjects retain their inherent tones (cf. 4.1.0) and verbstems are high for Class I verbs and low for class 2 and 3 verbs. This tone pattern is constant under NP-complement embedding provided that (sɪ́) Nà is the complementizer. But a change of complementizer, for those verbs which are marked in the Lexicon for more than one complement type, entails a corresponding change of tone pattern and a corresponding change in semantic interpretation thus:

35(a) Écè m (sɪ́) nà ɪ́.gà abyá'

I think that you will come (certainty/conviction)

(b) Écè m (sɪ́) mà₂ ɪ .gà abyá (Doubt)

think I { if } you will come
 { whether }

I wonder whether you will come

I am not sure that you will come.

36(a) Ásɪ́nɪ m nà únú aláala (conviction)

I thought (for certain) that you had gone.

(b) Ásɪ́nɪ m mà₂ únú aláala (Doubt)

I was wondering if you had gone.

37(a) Écéghekwe m na ɔ́.gà abyá (certainty)

I am still of the opinion that he will come.

(b) Écéghekwe m mà₂ ɔ́.gà abyá (Doubt)

I am still thinking whether he will come

I am still wondering whether he will come.

38(a) Eroghekwe m na ó ga abyá (certainty)

I am still thinking that he will come

(b) Eroghekwe m ma₂ ò ga abyá (Doubt)

I am still doubting whether he will come.

In the foregoing minimal pairs, the difference is due to different complementizers in the (a) and (b) sentences which are responsible for the change in the tone pattern of the pronoun subjects from High and High-Low in Na` clauses to Low and Low-Low in ma₂ clauses. The cumulative effect of these differences is a radical change in meaning from an assertion and its presupposition¹⁷ of truth in the (a) sentences to doubt and uncertainty and the consequent absence of any presupposition of truth in the (b) sentences.

We can account for this radical semantic and syntactic difference in either of the following ways: First, we can assume that two distinct main clause verbs are involved in each of the pairs of sentences under discussion, and go on to prove that this is really the case. The second alternative is the claim that there is only one and the same verb in the main clauses of each of these pairs, and that the meaning differences is due to the presence of the two distinct complementizers Na` and ma₂ which in turn depend on the complement types embedded as NP. We examine these alternatives in turn, starting with the first.

To argue for the existence of two distinct main clause verbs in the minimal pairs being investigated here, one needs to show that these purported verbs exist in the language independent of the Igbo complementation system. It is impossible to substantiate a claim such as the above;

¹⁷ Presupposition is used here in the sense of sincerity condition, that is, a Pragmatic motion. To presuppose something as a speaker is to take its truth value for granted and thus assume that your audience does the same. An Igbo speaker would use Na` and its attendant tone pattern (Mood) if he is sure of his facts, ma₂, if he is doubtful about them. For more information on this pragmatic notion of presupposition, see Karttunen (1973) L1 Vol. iv, No.2.

on the other hand, it is very easy to show that there are many homonyms
in the language, each with a distinct meaning and syntactic functions
which establish it as a verb in its own right. Consider the following
few examples as an illustration:-

- | | | | |
|-------|-------|-------------|----------------------------|
| 39(a) | ina̱ | | to backbite, to calumniate |
| (b) | ina̱ | (aux. verb) | - habitual/progressive |
| (c) | ibha̱ | | to enter, go in |
| (d) | ibha̱ | | to grab, hold |
| (e) | igo̱ | | to deny |
| (f) | igo̱ | (mūo) | to worship gods, shrines. |

Each of these verbs will take the inflectional markers of the Igbo verb, and have their Imperative forms thus:

- 40(a) Nàrá yānī gawá .
Backbite him you people go on.
Go on backbiting him, you lot.
- (b) Náá ázará m̃ h̃we
Keep on sweep for me thing: Go on doing the sweeping for me.
- (c) Bháá ósiiso
Go in quickly
- (d) Bhára m ya mba
Grab for me him wrestle: Wrestle with him for me.
- (e) Góó mu ēlee
Deny, I see: Deny, let me see.
- (f) Gókwaá mūo n'uhúru cī .
Do worship the gods in decline of day:
Do carry out the rites of worship in the evening.

From these few illustrative examples, it is obvious that, despite their phonetic identity, there are six distinct verbs, not just three, involved in the examples 40(a)-(f). We must point out that the different suffixes used in these examples do not affect the argument; the choice is arbitrary,

and any verb can co-occur with any suffix according to the intended meaning. A detailed study of Igbo affixes (prefixes and suffixes) has been done by Revd. Igwe (1973).

Now let us assume the existence of the following as distinct verbs in the paired examples 35-38:

- | | | |
|-------|------------------|-----------------|
| 41(a) | íce ₁ | to think |
| (b) | íce ₂ | " wonder, doubt |
| (c) | isi ₁ | " say |
| (d) | isi ₂ | " wonder, doubt |
| (e) | író ₁ | " think |
| | író ₂ | " wonder, doubt |

With these verbs, it is impossible to establish any case for more than one verb for each pair of the examples, as the following examples show:

- | | | | | |
|-------|-----------|----------|----------|-------------------|
| 42(a) | Cèère | yā | ecice | |
| | Think for | it | thought: | Think about it. |
| (b) | Cèère | yā | ecice: | *Wonder about it. |
| 43(a) | Sí(ī) | ya | byā | |
| | Say to | him | come: | Tell him to come. |
| (b) | *Sí(ī) | màka | yá | |
| | Wonder | about | it | |
| 44(a) | Ròó | màka | m' | |
| | Think | about me | | |
| (b) | Ròó | màka | m' | |
| | *Wonder | about me | | |

Observe from 41-44 that, with the exception of 43(b) where the syntactic form is deviant, it is the English glosses which are wrong. This rather unusual phenomenon can be accounted for from the fact that the wrong meanings are being assigned, in the (b) cases, to otherwise well-formed Igbo sentences. In other words, the meaning of 'doubt' and 'wonder' can be attributed to these verbs only in the Igbo complementation system; outside this construction type, such a meaning has no *raison d'être*.

This same argument holds for any suggestion that these verbs in question may well be polysemous, in which case, they have the feature [+ Dubitative] as one of their lexical entries. Such a feature specification can only be motivated by none other than the consideration of Igbo complementation. We therefore dismiss as adhoc the hypothesis that two distinct verbs are involved in each pair of the above examples. Such an approach would leave many questions unanswered.

The alternative argument, which we uphold in the rest of this section, is that there is one and only one main clause verb in each of the paired examples 35(a, b) - 38(a, b), that these verbs may take either Nà Indicative or Ma₂ Interrogative complements (isi will, in addition take a Si Imperative complement) according to the intended meaning of the complements. Recall that we have established (cf 4.1.0-4) that each complementizer marks a specific complement type -

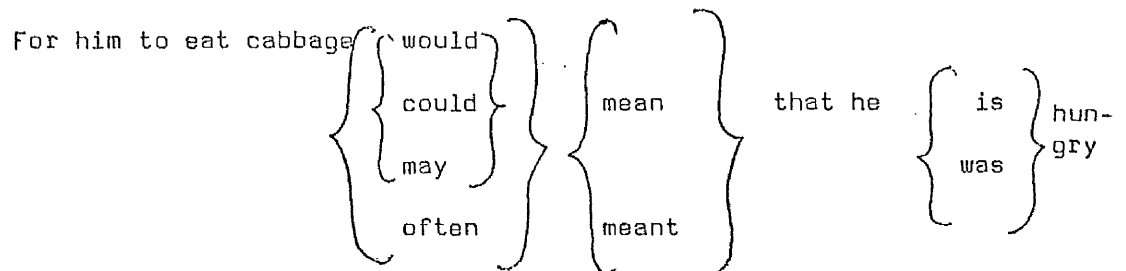
Si'	goes with	Imperative complements
Na'	" "	Indicative/Declarative
Ma ₂	" "	Interrogative
Ka/ma ₁	" "	Subjunctive "

Since some superordinate (main clause) verbs can introduce any of two or three complement types according to the intended meaning, it follows, therefore, that what we have been discussing here is a case of one of these main clause verbs taking two different complement types: a Nà Indicative in the (a) and a Ma₂ Interrogative in the (b) sentences of 35-38, respectively. These two mutually exclusive sentence types account for the meaning difference between the above (a) and (b) sentences. From this fact it naturally follows that the subcategorisation of verbs according to the complement types they may take is a necessary, though not sufficient condition for predicting the meaning and, consequently, the complement type embedded as NP: reference to the complement type is also necessary. Unless the Base structure provides

this information about the type of lower sentence, it will be difficult, if not impossible, in cases of verbs such as íçè, ísí, and írò, to determine which of two or three possible surface structures one may derive. To ensure the right combination of main clause predicates and complement types, the following two conditions need be satisfied:

- (a) verbs must be subcategorised according to the complementizers they take;
- (b) the complement type must be specified in the Base.

Bonney (1974)¹⁸ argues that the above two conditions are necessary, but not sufficient to ensure the correct combinations of main clause and complement, maintaining that "complement types are selected relative, not only to main clause verbs, but also to other factors in the main clause" (p.53-54). He supports his stand with the following English example:



and insists that "it is hard to see how even an elaborated system of syntactic features could be sufficient to handle data such as these" (ibid). He concludes from this evidence that subcategorisation features are unnecessary, and consequently, Bresnan's¹⁹ specification of Comp as a Deep structure node is uncalled for.

In Igbo, the situation is different; it happens to be the case in this language that the above mentioned conditions suffice to ensure the right combinations of main and complement clauses. Secondly, the Igbo equivalents of the above English examples do not raise any such problems in Igbo that Bonney points out in the English language, for the simple reason that all

18 BONNEY, W.L. (1974). OXFORD UNIVERSITY D.Phil. thesis.

19 BRESNAN, JOAN (1970) op.cit.

infinitival complements in Igbo (which are the Igbo equivalents of the above English examples) are transforms of sentential complements introduced by a specific semantic class of verbs - the Emotive predicates, which are discussed in chapter 5(5.2.0). One of Bonney's English examples quoted above has a factive interpretation; for such factive complements Igbo has a very unambiguous Base representation. For example, the Igbo equivalent of the following English example from Bonney's data cited above:

For him to eat cabbage often meant that he was hungry, is 45(a)

45(a) Írī edè'ó rīrī } fùtara na ág'ụ́ jìrī yá .
 { yá' }

{ To eat } cocoyam { which he ate } meant that hunger held him
{ Eating } { of him }

{ For him to eat } cocoyam meant that he was hungry.
{ His eating }

A sentence such as 45(a) can only derive from a factive Nà' clause of the following type

45(b) Nà' o riri edè' fùtara na ág'ụ́ jìrī yá.

The fact that he ate cocoyam meant that he was hungry. The relative clause in 45(a) can be optionally deleted to yield 45(c) which superficially looks like the type of infinitives associated with Emotive predicates.

45(c) Írī edè' yá' fùtara na ág'ụ́ jìrī yá.

It is for this reason that we have insisted on the important distinction between the underlined homonyms in the following 46(a) and (b), a distinction based on syntactic grounds and borne out by their respective meanings in these and similar examples:

46(a) Dím̄kpa ímēvo onwe yā nà emé iñwerē.

For a man to disgrace himself is a shame.

(b) Ógù ímēvo onwe yā n'òh̄a mere m' iñwerē.

For Ogu to disgrace himself in public shamed me.

The fact that Ogu disgraced himself in public shamed me.

This distinction is discussed at length in 5.2.0 where we bring evidence to show that whereas sentences such as 46(a) are derived from conditional clauses functioning as NP subject to Emotive predicates, those like 46(b) derive from Na Factive complements also functioning as Subject NP to some factive Emotive predicates. In other words, Emotivity and Factivity are not necessarily mutually exclusive because there are some Factive Emotive verbs.

Granted, then, that Igbo does not run into the same or similar problems as English in subcategorising verbs according to the complement types which they may take, and that the complement type needs to be specified in the Base²⁰, the question arises as to how best to mark this distinction of complement types. Bonney contends that it is not a distinction that can be marked by the complementizer alone because, although "for - to is confined to non-propositional complements, that, on the other hand, occurs with both propositional and non-propositional complements, and in consequence fails to mark the distinction between the two types." Bonney's argument that complementizers in English fail to mark the above distinction is a consequence of his too much reliance on semantics. Because his Base structure is heavily biased in favour of semantic trees, he runs into the problem of not being able to represent all his semantic information in terms of his semantic trees: the case in point is the problem of how to represent the propositions expressed by Indicative complements in his semantic Base structure. Although he comes off nicely with his Causative analysis for Factive predicates (p.77-79) and the systematic account of Like-Subject predicates and their interaction with EQUI and SUBJECT and OBJECT RAISING,

20 Bonney 1974: (p.55) holds a different view; he does not agree that this necessary distinction must be marked in the Base, but that it must be represented at some stage in the derivation, since such a distinction depends crucially on what he terms the propositional and non-propositional complements. With a Deep structure which is semantic and an analysis that draws so much from McCawley's Predicate Raising, which creates complex surface predicates (lexical items) from more basic ones, this distinction comes out well, especially in the Causative analysis (for Factive complements p.63 ff).

he fails, not surprisingly, to give any such systematic analysis for the Propositional - non-propositional distinction, apart from the vague suggestion that verbs of saying (Expositives) and those of knowing (Cognitives) may be analysed respectively as $[[\text{SAY}] [\text{TRUE}]]$ and $[[\text{HOLD}] [\text{TRUE}]]$. At the present state of our knowledge of semantics, it seems to us sufficient to point out whatever systematic correlation there might be between the syntax and semantics of natural language, leaving its formalisation to such a time that we can have more information about semantic structures. This is what we have tried to do for Igbo, a little known language and relatively very little written about.

To answer the question raised at the beginning of the preceding paragraph as to how to mark the distinction into Proposition and non-proposition, we have to point out that this could be done in either of two ways in Igbo:

- (a) by either specifying the complementizer, or
- (b) by specifying the complement type.

By specifying the particular complementizer, given that verbs are subcategorised according to the complementizers they may take, we are in effect pinpointing the only complement type that can guarantee the desired semantic interpretation. This is so because no complementizer may introduce more than one complement type, that is, one proposition/non-propositional type.²¹ What happens in Igbo is that some verbs may be marked for as many as three complements, but each complementizer is confined to only one complement type, a fact which contrasts with the situation in English where that can occur with either the Indicative (Propositional) or with the Subjunctive (non-propositional) complement. So for the Igbo language, specifying the complementizer means specifying the type of lower sentence or complement.

21 The exception to this rule is si' which, it has been pointed out (cf 4.1.0-4.1.3 & 4.1.5), may be substituted for any of the others - Na, mà, and kà/mà, in colloquial usage of this dialect, or precede them optionally, and all this is in addition to its specialised function as the sole Imperative complementizer.

Alternatively, one can specify the sentence type embedded as complement and, thus, predict the complementizer from it. This is the position that Bonney advocates when he argues that complementizer choice 'depends directly on some internal property of the complement and only indirectly on the main clause verb.' Each of these two methods will involve some re-write rules of the following type:

(a)	\bar{S}	\longrightarrow	comp.S
(b)(i)	S	\longrightarrow	Pre S
(ii)	Pre	\longrightarrow	$\left. \begin{array}{l} \text{IMP(ERATIVE)} \\ \text{INDIC(ATIVE)} \\ \text{INTE(RROGATIVE)} \\ \text{SUBJUNCT(IVE)} \end{array} \right\}$

To specify the complementizer, given the main clause verb, entails something like $N\grave{a}$ S or

$m\grave{a}_2$ S et cetera

Equally, specifying Q S or

SUBJUNCT. S can only entail $m\grave{a}_2$ S or $k\grave{a}/m\grave{a}_1$ S

respectively, and nothing else.

The question that remains, then, to be answered is how we get $m\grave{a}_2$ S or $k\grave{a}$ S from Q S and Subjunct S respectively. Two methods suggest themselves: the first is a Context-sensitive re-write rule of the following form:

$Q \ S \longrightarrow m\grave{a}_2 \ S$ if both Q and S are directly

dominated by S which can be traced uniquely to an NP. The second method consists of a substitution transformation which inserts the appropriate complementizer for the particular pre-sentence node. But we reject this complementizer insertion rule since we have shown that complementizers alone do mark the type of distinction necessary to ensure the correct combination of main clause verbs and complement sentences. This leaves

us with the first method which re-writes the pre-sentence nodes Q, Indic. et cetera as ma_2 and Na respectively. This rule is in itself a Deep structure specification of complementizer and has nothing to recommend it over and above the direct introduction of the complementizer by re-writing \bar{S} as, say, Na S. Moreover, we would not like to lexicalise these nodes through a context-sensitive rule because elsewhere in Igbo transformational grammar(cf.6.1-6.2) they serve only as triggers to set off the appropriate T-rule applications. From all the evidence so far given, we conclude that there is a strong case for a Base specification of the node, Comp in Igbo. If Bresnan's argument for a Deep structure Comp node fails in English, there is a strong motivation for it in Igbo.

Moreover, it can be shown that complementizers in Igbo are far from the semantically empty morphemes which they are supposed to be in English. On purely synchronic evidence, some of these complementizers are verb forms of some existing verbs, the most obvious case being si from the verb isi - to say - cf 4.1.3). Not only complementizers, but also other function words or morphemes of Igbo are known to be verb forms taking such suffixes as are associated only with verbs in the language. On the basis of this synchronic evidence, we make the claim that other complementizers and function words in Igbo must be erstwhile verbs. This case is argued at length with supporting syntactic evidence in the following chapter 5. Igbo complementizers have definite semantic role to play in NP-complementation.

We have argued that Igbo verbs can be very conveniently subcategorised according to the type of complements they can occur with. This sub-categorisation of verbs is not an arbitrary one; subcategories of verbs generally belong to semantic groups, and these semantic groupings may have their syntactic reflexes. For example, verbs which take Na complements are the only verbs in Igbo which make some claim about the truth value of their complements. This claim may or may not be true, but it is a claim all the

same - an explicit claim by either the superordinate subject or somebody mentioned in the main clause that what he says, hears, thinks et cetera is either true or false. No other category of complements in Igbo makes such a claim. If such a claim is factive, that is, if the matrix or main clause verb happens to be one that entails the truth of what it claims, then the complement of such a verb may be optionally relativized to give what we have described in chapter 6 (cf 5.1.2) as Factive Relative clauses. As we make abundantly clear in the above chapter, such relative clauses (the output of the T-rule Relativization-Relat₂²² which is exclusive to factive Na' complements) constitute the syntactic exponent of factivity in Igbo. Only factive Na' complements may undergo this rule of relativization, T-Relat₂, to yield an acceptable Igbo surface structure. By this statement, we do not imply that only factive complements meet the structural index for Relat₂; no, all Na' complements do meet the requirement for this rule application, but only factive predicates guarantee the grammaticality of the output sentence.

The verbs which co-occur with ma₂ complements, on the other hand, are those verbs which ask for information, rather than make a claim about the truth value or otherwise of the propositional content of their complements. Admittedly, there will be a lot of cross-classification between Na' and ma₂ complement verbs for the simple reason that subcategorisation is not hierarchic - a phenomenon that is natural in human language. This cross-classification involves those verbs with such semantic characteristics that they can either express a claim about the truth value of their complements, or doubt and, consequently, ask for some information about them.

22 The implication is that there is another rule of Relativization T-Relat₁; this is the case. The rule of Pseudo-cleft sentence formation in Igbo entails an obligatory relativization of the output structure from the insertion of hwe - 'thing/what' and the copula wu before the complement sentence. Unless this is done, the resultant surface structure will not bear the normal tone pattern associated with relative clauses in Igbo. This rule Relat₁ is therefore contingent on Pseudo-Cleft which is a general rule in any language, and consequently is not the marker of factivity, as Relat₂ is.

But inspite of the semantic differences between Na^{\backslash} and ma_2^{\backslash} complement verbs, they share the following syntactic characteristics:

- (a) they do not impose any tense restrictions on the verb of their complements and
- (b) these complements are never subject to Equi NP Deletion.

The first of these properties can be explained on the grounds that there is no dependency relation between these main clause verbs and the verbs of their complement such as one sees between $ka^{\backslash}/ma_1^{\backslash}$ Subjunctive verbs and the verbs of their complements.

The verbs associated with the subjunctive ($ka^{\backslash}/ma_1^{\backslash}$) complements on the other hand, are generally those that express wishes, requests, expectation and such non-propositional predicates as designate efforts and determination. All these verbs have one thing in common - they always introduce complements whose propositions are mere expectations, and the expectation of an event does not necessarily guarantee its realisation. Because of this semantic constraint, the verb of a $ka^{\backslash}/ma_1^{\backslash}$ complement is always future in relation to the time expressed by the main clause verb, hence the verbs which can introduce the subjunctive complements have been variously described as verbs of 'forward-looking aspect' (Aijmer, K. 1972) 'forward-looking' verbs (Bonney (1974), and 'futurist verbs' (Josephs, 1974). In Igbo, where the non-infinitival ($ka^{\backslash}S$) and the infinitival forms exist side by side and the latter can be shown to be a transform of the former, the future tense marker ga never occurs in the ka^{\backslash} form. It is this futurity of the ka^{\backslash} complement verbs and the identity of the superordinate and subordinate NP's that guarantee the application of EQUI, given that the other condition²³ has been met. In other words, only the Subjunctive Complements in Igbo may undergo the Equi-NP Deletion rule to yield

23 The other condition is that the main clause verb must not be a two-place predicate - that is one that appears in this type of structure
 $VP \rightarrow V \quad NP_1 \quad NP_2$; this constraint is discussed in chapter 8.

infinitival complements which are always in object position in contrast to those of Emotive predicates which are invariably in subject position. It will thus be seen that the semantic attributes of these verbs are reflected in the type of T-rule to which they are subject :-

On no account will Na' or ma₂' complement-taking verbs satisfy these two requirements of identical NP's in both clauses as well as future tense (be it marked or unmarked) in the complement clause. Since verbs can only be subcategorised according to the type of complements they can take, and since this subcategorisation can be effectively marked by complementizers, there is no reason why complementizers should not be introduced in the Base by re-write rules.

CONCLUDING SUMMARY:

The subcategorisation of verbs on the basis of the complementizers each subgroup may take is necessary, but not sufficient to ensure the right combinations of main clause verbs and complement types in view of the fact that some of these verbs are capable of taking more than one complementizer. Therefore the specification of the particular complement from a list of two or three possible complement types is needed to supplement the above subdivision of verbs according to possible complementizers. But in Igbo, it happens to be the case that each complementizer corresponds to one and only one complement type (witness the fact that infinitivals are transforms of the basic complement types, and hence the Igbo equivalents of English for-to complements are transforms of ka' subjunctive and other NP subject complements to emotive predicates). This fact means that complementizers alone can effectively mark complement types in the language, and this argues for their specification in Base structures in preference to the alternative method which re-writes such pre-sentence nodes as Q S as ma₂' S in specific contexts. We reject this method from the over-all consideration of Igbo grammar where nodes such as Q, Cond(itional) Subj(unctive) et cetera are no more than ordinary triggers for the application of specific T-rules.

We also argue that Igbo complementizers as well as other function words such as prepositions and conjunctions can be shown, from synchronic evidence, to be verb forms, a phenomenon which leads one to hypothesize that those function words in the language for which there is no synchronic evidence of relationship with existing verbs must be associated with some erstwhile verbs. Thompson and Li (1973) come out with a similar conclusion about Chinese co-verbs and prepositions, while Josephs (1974) reaches the conclusion that the distributional characteristics of Japanese complementizers and their close association with some Japanese verbs do support their specification in the Deep structure of complement constructions in the language. That there is as yet no cross-linguistic evidence from other members of the kwa-family of languages to which Igbo belongs in support of our hypothesis is a reflection of the present state of the study of this language group. If the so-called function words are verb forms of some sort, then they have a semantic role to play in the grammar of these languages, unlike their counterparts in English which may be devoid of such a role. From the evidence presented here, we assume, henceforth, a Deep structure specification of the node Comp. which dominates the appropriate complementizer selected from a group of possible complementizers according to the complement sentence embedded as NP.

Chapter 5 Na` Indicative Complementation

5.0.0 Introduction

This is the first of four chapters devoted to the mechanics of Noun Phrase Sentential Complementation in Igbo - that is, the transformational processes involved in the construction of Noun Phrase Sentential complements in the language, and the constraints on the applicability of these transformational rules (T-rules).

It will be recalled (cf 4.1.0 - 4.1.3) that from our investigation, we have been able to distinguish the following categories of NP - complements in Igbo:

- | | | | |
|-----|------------------------------|-----------------|-------------|
| (a) | Na` | (Indicative) | Complements |
| (b) | Ma ₂ ` | (Interrogative) | " |
| (c) | Si' | (Imperative) | " |
| (d) | { Ka'
Ma ₁ ' } | (Subjunctive) | " |

Igbo Infinitival complements are not Deep Structure complements, but transforms of some, but not all, of the above complement types. For example, some Emotive Verbs, which may take Na` or Ma₂` complements as subject are a source of Subject NP infinitival complements, (see 5.1.3, and 5.2.0), and Ka'/Ma₁' subjunctive complements provide yet another source of Igbo Infinitival object complements, given a special subclass of verbs in the main clause; subjunctive complementation is fully discussed in chapter 8. Whenever we refer to Infinitival Complements in Igbo, it should always be borne in mind that these are derived rather than underlying forms as is the case with the English for - to complement which is basic and not a transform.

We have also observed that the Igbo equivalents of English WH-Questions, functioning as NP to complement-taking verbs, are not instances of NP - complements, but of complex Nominals (a kind of Referential NP) with a nominal head and definitizing or relative clause.

In view of the relationship between Yes/no and *Kedú* (WH-) Questions, we have decided to discuss their analysis in one and the same chapter 6 in order to facilitate comparison and contrast.

Chapter 7 is devoted to the discussion of Imperative complementation, while chapter 8 discusses the Subjunctive *Ka/Ma*₁ complements. In the final section of this chapter 8, we critically examine and reject the distinction between Noun Phrase and Verb Phrase complements as having no justification in the Phrase Structure of the Igbo language. In the final chapter 9, we try to piece together the observations and conclusions that can be drawn from this investigation with regard to the Igbo language in particular and general linguistic theory. After each chapter, a sample list of verbs which can function in the main clause of that complement type is given.

Chapter 5 is solely concerned with *Na* complementation and related questions. Let us recall that this is the only category of Igbo NP-complements which can be factive. The terms *factive/non-factive* and *emotive and non-emotive* are discussed in detail in 5.1.2 where they will be shown to have syntactic justification.

This chapter is divided into the following sub-sections: Section 5.0.1 argues the case for the primacy of complementation as opposed to Nominalisation, thus disagreeing with the contrary views expressed in Stockwell et al. (1973: 526-527). We also justify in this section, the Phrase-Structure (P-S-) rule

$$(i) \quad \text{NP} \longrightarrow \begin{array}{c} \text{N} \\ \left[\begin{array}{l} +\text{pro} \\ +\text{def.} \\ +\text{abs} \\ -\text{loc} \end{array} \right] \\ \text{ya} \end{array} \quad \text{S, that is, the ya comp S analysis.}$$

which specifies the complementizer as a Base node. Recall that the defence for this Deep Structure specification of comp. has been defended in 4.3 (p.217ff).

In sections 5.1.0-5.1.3, we discuss in detail the transformational rules which Na complements undergo, critically examining such parameters of distinguishing among complement-taking verbs as factivity and non-factivity and Emotivity versus non-Emotivity. We come to the conclusion that such distinctions are well-motivated in the analysis of Igbo complement constructions, although emotivity and factivity are not necessarily mutually exclusive, since some emotive verbs are, in fact, factive.

Section 5.2.0 establishes what we have argued elsewhere (10.3.1) namely, that surface ma₂ complements can originate from an underlying Yes/No Question or from a Conditional Clause of either the (a) or (b) type below:

- | | | | | | |
|-----|---|--------------------------|---|---|--------------------|
| (a) | { | Ya' wuru ma ₂ | } | - | If it is that S |
| (b) | { | A' si na | } | S | If one says that S |

A thorough examination of these conditional clauses shows that, when they function as Subject NP to Emotive verbs, they are one of the sources of Igbo infinitival complements in the language.

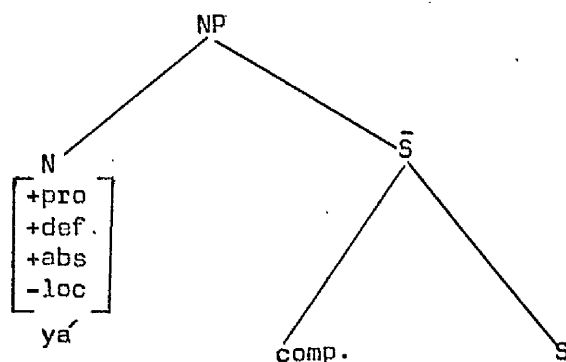
The final section of this chapter, 5.3.0 gives a sample list of matrix verbs involved in Na complements.

5.0.1 Complementation Or Nominalisation

Recently, it has been argued (Stockwell et al. (1973: 516-29)) that what Rosenbaum (1967) analyses as Noun Phrase complementation is better treated as Nominalisation. They argue, very convincingly, that the distinction between NP and VP complements has no solid syntactic justification for English, a view which we uphold for the Igbo language (see chapter 8, (8.4.0).) Stockwell, Schachter and Partee (ibid) also question and reject Rosenbaum's analysis of

NP → (Det) It S in favour of their own analysis of
 NP → S , maintaining that Nominalisation, rather than
 complementation, is primary to the analysis of such English constructions
 as described by Rosenbaum (1967).

In characterising the system of complementation in Igbo, we take complementation to be primary, since there is sufficient syntactic evidence from the language in support of an analysis of the following type in which the abstract pronominal form - *ya'* ('it' in English) precedes the sentential complement thus:



Recall that our analysis differs from Rosenbaums in that we introduce our complementizers in the Base, while he inserts his transformationally. Since equivalent Igbo sentences such as are being described here are directly dominated in Deep Structure by the node, NP, the argument is not whether these sentential structures function as NP's (Stockwell et al. Ibid 529), but whether our preferred analysis of $NP[Ya' \text{ comp } S]_{NP}$ is justified for the Igbo language.

We have demonstrated (4.3 p.217 -233) that the choice of the one rather than the other of the Igbo complementizer morphemes has such important syntactic and semantic consequences that a Base generation of the complementizer is imperative. In the rest of this section, we shall show why the presence of the abstract proform *ya'* (it, thing) is necessary for an adequate characterisation of Noun Phrase complementation in Igbo. In order to justify the above analysis, we offer the following reasons:

- (i) $Yá'$ is the pronominal form to which the constituent S is a complement; its Deep structure presence is justified by its presence in Surface Structure, especially after Verbs of Saying, whenever emphasis is intended. In the absence of the complement sentence, $Yá$ is the proform.

We illustrate these points with the following few examples:

- 1 (a) $Ógù$ kwuru ($yá'$) akwu ná $ókeòkpa$ ebééle.
 Ogu said it saying that cock has crowed.
 Ogu said (it) that the cock has crowed.
- (b) $Ánūna$ \bar{m} (ya) ná dí $yā$ $ālola$ $àlā$ $bèkéé$.
 Heard have I it that husband her return have from land
 of white people.
 I have heard (it) that her husband is back from overseas.
- (c) $Únú$ $anúkwa$ $yā$
 You (pl) heard have also it: You have also
 heard it.
- (d) I $kwéle$ ($yā$) ná $mádhù$ ji $anwú$ $ānwú$?
 You believe have it that person does die death?
 Do you believe that a man can die?
- (e) $Ékwéle$ \bar{m} (ya) $n̄thúrú$ (na' S)
 Believe have I it at last
 I have come to believe (it) at last

It will be observed from (e) above that the proform $yā'$ can be separated from its complement structure by the intervention of such lexical items as $n̄thúrú$ (then).

Such an additional feature was included by Sinha (1970) in an unpublished York University Ph.D. thesis on Predicate Complement Structures in Hindi and English.

- 1 (f) Ásí m ya mèchié ọ́nǔ
 Tell I him/her shut up mouth
 I am telling him to shut up.

- (g) Í gwámáara yā ya.
 You tell well to him it: You did well to tell him so.

If the *ya'* proform is optional (as shown by the use of the circular brackets) in most of the foregoing examples of *Nà* complements, it is definitely obligatory in the following examples of *Mā₂* Interrogative complements; the obligatoriness of *ya'* in (2a-c) is due to the fact that the matrix (main clause) verbs are those which have cognate/inherent complements in Igbo:

- 2 (a) Hwé anyị cèghe écìce yā wū mā₂ ọ́ díkwa ndhù
 What we are thinking it is whether he is alive:
 What we are puzzled about is whether he is still alive.
- (b) Hwé anyị nà atú anyā ya wū mā ña gadukwara.
 What we expecting it is whether they did reach:
 What we are expecting to hear is whether they did arrive.
- (c) Hwé Ibě tughá újọ yā wū nà ndi ohí gá abya.
 What Ibe is afraid it is that thieves will come:
 What Ibe is afraid of is that thieves will come.

In the above examples, (which are Pseudo-Cleft sentences) each of the verbs has a cognate complement which is part of its meaning as well as syntactic characteristics thus:

ice	ecice	-	to think
itū	anya	-	to expect, anticipate
itū	ujo	-	to fear, be afraid.

For verbs such as these, the *ya'* proform is obligatorily present in Cleft sentences of the above type. From these few illustrations, it is obvious that the Deep Structure proform *ya'* is not merely the analyst's construct, at least, in *Na* and *Ma*₂ complements. The same could be shown to be true of *Si'* Imperative complements.

It is true that a similar case for *ya'* is not easy to establish for such categories of NP complements as the Subjunctive ones introduced by *Ka/Ma*₁. However, the need for such a Deep Structure *ya'* becomes obvious when one considers the second reason for the *ya'* comp. S analysis:

(ii) The presence of a Deep Structure *ya'* enables one to capture some paraphrase relationship among some Igbo sentences. The two rather general rules involved are:

- (a) The *ya'* to 0 conversion, and
- (b) The *ya* to *hwe'* conversion rules

Both of these are morphophonemic rules. We discuss them one after the other:

(a) The *ya'* to 0 conversion entails the following transformational processes in the generation of (3a) from (3b).

- (3a) 0' di' mkpa: It is necessary.
- (3b) Ya' di' mkpa
- (3c) 0' di' mkpa (by *ya* to 0 conversion oblig.)
- 0' di' mkpa (by vowel harmony oblig.)

What the above rules do is as follows: the first rule converts an underlying proform *ya'* into the phonological form 0 which now becomes the input to the Phonological rule of Vowel Harmony (cf 2.1.1.).

(b) The *ya'* to *hwe'* conversion

This rule which substitutes *hwe'* for *ya'* is needed after the optional rule of Extraposition has moved the complement to the end of the entire sentence, as the following (4a-c) show:

4 (a) *Ya' na' Ogu ga ejhe di mkpa.* (Base)

(b) *Ya' di mkpa na Ogu ga ejhe* (By Extraposition)

(4b) meets the structure description for either *Ya'* to *O* conversion or for ^{the} Pseudo-Cleft rule. Applying the first of these, we get (4c), but ^{and} by the application of Pseudo-Cleft to the same (4b):

(c) *O di mkpa na Ogu ga ejhe.* (by *Ya'* to *O*)

It is necessary that Ogu should go.

(d) *Hwe' di mkpa wu na Ogu ga ejhe.* (by Pseudo-Cleft)

(e) ^{NP} [*Hwe' di mkpa*] *wu na Ogu ga ejhe* (by Relativization)

What is important is that Ogu should go.

It will be observed from the foregoing derivation that Extraposition creates an input structure for either *Ya'* to *O* conversion or for *Ya'* to *Hwe'* conversion. This means that whenever the proform *Ya'* is sentence-initial, it must either be changed to the harmonising *O* or to the proform *Hwe'*. The item *hwe'* - 'thing' is a special member of an open class of items, and it can stand for any inanimate object and shares the same distributional relationship with *Ya'*. It is used in place of *Ya'* whenever *Ya'* is followed by either a relative clause or a definitizing (deictic) item, as in (4e) above where the complex NP is made up of the head *hwe'* followed by a qualifying clause *di mkpa* (*hwe' di mkpa*). We shall discuss in detail the fact that the output of Pseudo-Cleft in Igbo is a relative clause NP in section 5.1.0: p. 262-66.

Let us go back to the main argument for a Deep Structure $Yá'$ from which the harmonising 0 is derivable and for which \tilde{hwe}' is substitutable in the appropriate contexts. Since it can be shown that $Yá'$ is morphophonemically related to 0 and \tilde{hwe}' , and since all categories of Igbo NP complements are subject to at least one or the other of the above rules (some are in fact subject to both of them), it therefore makes for economy without detracting from descriptive adequacy to generate $Yá'$ in the Base and relate these other forms to it by means of morphophonemic rules.

Now consider the third reason, which is an important one.

- (iii) The rule of $Yá'$ to 0 conversion has its motivation independent of NP complementation, being a general rule of Igbo syntax; therefore its application in Noun Phrase complementation is but an exemplification of its general use.

This third reason needs some explanation. Both $Yá'$ and 0 are in this same system of one term (a system of one term in the sense that it is ya' and ya' alone that can function as the head of Igbo sentential complements). It thus shares this characteristic with the third person singular pronoun $Yá'$ he/she, as the following Igbo pronominal system shows. In Igbo pronominal system, there is such a distinction as between Separable and Inseparable pronouns thus:

SEPARABLE			INSEPARABLE
1st	Sing.	$Mú'$	M
2nd	"	$Gí'$	I
3rd	"	$Yá'$	0

There is no such distinction in the plural. Except for the first person singular, all other inseparable forms harmonise with the vowel of the following verb thus:

- 5 (a) 0' gbūru eke : He killed a python.
 (b) 0' h̃wūru éke : " saw " "
 (c) 0' rīri any : " ate some meat
 (d) 0' shīri ashī : " told a lie.

The quality of the 0 therefore depends on the quality of the vowel of the verb stem, this is what we mean by vowel harmony. Such facts as these must be reflected in a transformational account of the language. There is no other choice than to derive the inseparable forms from underlying separable ones by means of phonological rules. 6(a-) must be seen as deriving from either underlying or intermediate structures in which the NP is Ya thus:

- 6 (a) Ya' gbūru éke → 0' gbūru eke
 (b) " h̃wūru éke → 0' h̃wūru éke
 (c) " rīri any → 0' rīri any
 (d) " shīri àshī → 0' shīri ashī

These two forms of Ya' are positionally determined:

The harmonising 0 is always in subject relation to the verb, never in object relation, whereas the Ya' form can be in either relation depending on the type of construction concerned. In other words, whereas the Ya' form may be either subject or object, the 0 form can only be subject as the following examples illustrate:

- 7 (a) Ah̃wūna m̃...ya...
 I have seen him/her/it
 (b) Ya' bya, anyi agáwa.
 If he comes we shall set out.
 (c) 0' byàra fáa.
 He came early.
 (d) *Ya' byàra fáa : He came early.

The ungrammaticality of 7(d) above is due to the non-application of the obligatory rule of Ya' to 0 conversion.

The *Yá* form can function as subject only in the following construction types.

- | | | |
|-------|-------------|--------------|
| (i) | Imperative | Construction |
| (ii) | Conditional | " |
| (iii) | Narrative | " |

We give only one example of each construction type:

- 8 (a) Imperative : *Yá byá* : Let him come.
- (b) Conditional : *Yá ñwụ m, ya āgbaa*
If/whenever he sees me, he runs away.
- (c) Narrative : *Ányị gákwùru yá, ya ēkwe ibyāni*
We met him and he consented to come.

In 8(c), we see *Yá₁* (him) as object of *gákwùru* and *Yá₂* as the co-referential subject of the conjunct - *Yá ēkwe ibyāni*.

Sentences such as 7(a) show that *Yá* is neutral as to gender, there being no grammatical gender in Igbo. This fact, however, leads one to the next important consideration about a Deep Structure *Yá*. In Igbo, there is only one homonym, *Yá*; consider the following sentences:

- 9 (a) *Ọ còrọ yá*
He wants { him
her
it }
- (b) *Ọ nọ { n'ụlọ } He is at home.*
(c) *— — { Yá } " " in (it).*

It will be observed from 9(c) that *yá* represents the pronominalised form of the locative phrase *n'ụlọ* (in the house).

All these uses of *yá* have a lot of similarities in that *yá* in all the examples so far given is definite and pronominal; these seem to be the core meaning shared by *yá* and other personal pronouns in Igbo. Whether *yá* stands for a person or thing depends on its anaphoric relationship in any sentence.

We therefore regard other attributes such as personal, abstract and locative as distinctive. For these reasons, we analyse Ya' as a complex symbol (cs) of the following features¹

+ pro
+ def
+ hum
+ loc

From this feature analysis, it follows that Ya in (9a) will have the following matching reading:

- | | | | | | | | |
|------------|--|-------|-------|-------|------------|--|--|
| (a) | <table border="1"> <tr><td>+ pro</td></tr> <tr><td>+ def</td></tr> <tr><td>+ hum</td></tr> <tr><td>+ 3rd pers</td></tr> <tr><td>- loc</td></tr> </table> | + pro | + def | + hum | + 3rd pers | - loc | for him/her |
| + pro | | | | | | | |
| + def | | | | | | | |
| + hum | | | | | | | |
| + 3rd pers | | | | | | | |
| - loc | | | | | | | |
| (b) | <table border="1"> <tr><td>+ pro</td></tr> <tr><td>+ def</td></tr> <tr><td>- hum</td></tr> <tr><td>- abs</td></tr> <tr><td>- loc</td></tr> </table> | + pro | + def | - hum | - abs | - loc | for the reading 'it' standing
for animate but non-human objects |
| + pro | | | | | | | |
| + def | | | | | | | |
| - hum | | | | | | | |
| - abs | | | | | | | |
| - loc | | | | | | | |
| (c) | <table border="1"> <tr><td>+ pro</td></tr> <tr><td>+ def</td></tr> <tr><td>+ abs</td></tr> <tr><td>- loc</td></tr> </table> | + pro | + def | + abs | - loc | for the ya' head of a sentential
complement, where + abs
means - hum , but not vice
versa | |
| + pro | | | | | | | |
| + def | | | | | | | |
| + abs | | | | | | | |
| - loc | | | | | | | |

¹ The above feature analysis applies to Ya' as much as to other personal pronouns. For example; all personal pronouns can be fully specified for features as follows:

+ pro
+ def
+ hum
+ plural
+ loc

where + hum means - abs and vice versa
Thus Anyi 'we' will be , and My 'I' will be:

+ pro
+ def
+ 1st pers
+ plural
- loc

and

+pro
+ def
+ hum
+ 1st pers
- plural
- loc

where - plural
means + singular

Anyi

My

and so on and so forth. We have so far concentrated on Ya' because it is the various uses of Ya' which ought to be distinguished by their distinctive features.

(d)

+ pro
+ def
+ abs
+ loc

for locative ya' as in
9(c)

In Igbo, the distinction between Expletive and Anaphoric 'it' such as is made in English obtains, but under a different set of constraints, in view of the fact that every sentence of the language has a subject to which subsequent pronominal forms refer thus:

- 10 (a) Hwé' e' wú hwe ojoō
Thing this is thing bad : This is a bad thing.
- (b) Ó wū hwe ojoō
It is thing bad : It is a bad thing.
- (c) Mírí {dòghe }
 {nà édo }
Rain/water is falling : It is raining.
- (d) Ánwū {chāgha }
 {nà achá }
Sun is shining: It is sunny.
- (e) Oyi {tùgha }
 {nà atú }
It is cold.

For 10(b) to make sense, it must be related to 10(a) in a discourse, or refer to some other item previously mentioned, and this applies to 3(a) on page 281, but not to 4(c), while 10(c) and (d) show conclusively that the English Expletive 'it' is represented in Igbo by distinct lexical subjects.

Summary

In the foregoing section we have argued for a Deep Structure abstract proform ya' in the analysis:

N	N	Comp	S
	+ pro		
	+ def		
	+ abs		
	- loc		
	Ya'		

..... on the following grounds:

- (i) It remains present in surface structures
- (ii) It pronominalises sentences and locatives (prepositional phrases), while *ya'* personal pronoun pronominalises NPs.
- (iii) Its specification in the Base: enables one to state some T - rules in Igbo very economically, and thus capture necessary paraphrase relationships among sentences of Igbo.
- (iv) The rule which converts *ya'* to the harmonising *O* in the appropriate contexts is independently motivated in Igbo, therefore its application to the proform *ya'* in NP - complementation is not its *raison d'être* but merely an illustration of its general applicability in Igbo syntax.

In view of the foregoing reasons, we shall stick to the *ya'* comp S analysis as being suitable to an adequate characterisation of Igbo complementation.

We take no issue with the view that Nominalisation is primary to the analysis of complement sentences; all we say is that complementation is a special case of Nominalisation which deserves a detailed treatment in its own right.

3.0.2. Order And Cycle In Syntax

In order to reduce the excessive power of Transformational theories of language and increase their empirical content, T - G grammarians have proposed that, in addition to placing some constraints on the form of the Base, general restrictions should also be placed on the form and operation of possible transformations. Thus the Boolean condition on analysability (Chomsky, 1965: 143-4), the recoverability of deletions (Chomsky, 1964a: 71), the A - over A principle (Chomsky, 1964 b: 930-1)

And Ross's movement constraints as originally proposed (Ross 1967) are all proposals of this kind. Such constraints as these are described as 'local' in the sense that they restrict the matching of Base and Surface structures by limiting the ways in which successive stages of derivations may differ. In addition, various GLOBAL constraints have also been put forward to block derivations which have been permitted by local constraints if the output of transformations is a derived structure which differs from the corresponding Base structure in certain ways. Thus the Cross-over constraint (Postal 1971) and the Lowering constraints (Lakoff 1971) are examples of this second type. These constraints are global because they make the applicability of a rule at a given stage in the derivation dependent, not only on the structure of the tree at that stage, but on what has happened at earlier stages in the derivation, that is, on the derivational history of the tree. Another type of derivational constraint considered essential in Transformational theories of language is Extrinsic rule ordering, although a lot of doubt has been recently cast on its validity. If Extrinsic Ordering is a derivational constraint, then one would naturally expect it to be applicable to languages other than English, for instance, the Igbo language.

As of now, too little is known about the Igbo language to warrant any rigid assumptions about the principle of Order and the Cycle in a transformational grammar of the language since, to be valid, such assumptions must await more facts from detailed studies of Igbo. This has to be so in view of the following facts: Any assumption or hypothesis about a phenomenon is bound to interact with a hypothesis about other phenomena in the same language; even an exact formulation of each may depend, to some extent, on the form of other rules.

Add to this, the fact that in any system of ordered rules, the the form and order of such rules must reflect the general form and order in the language. We are as yet in no position to give such forms and order: they are still far from clear. But what we are clear about is what the rules do and, approximately, what structures they operate on.

However, the hypothesis of Extrinsic Ordering has been called into question even for English, a language so much described and studied by both native speakers and foreigners. Koutsoudas² (1972, 1973) has taken the extreme view that transformational rules are unordered. Having demonstrated that some T - rules are not strictly ordered, he goes on to argue that along with Partial Ordering no order must be taken as two possible alternative hypotheses until there are facts to falsify the No-Order hypothesis.

Twila Lehman³ (1972) writing in the same vein claims that a Marking convention is as effective as an Ordering one and, in fact, explains certain things which the Order hypothesis fails to explain. Such a marking convention had earlier been advocated by Kenstowicz⁴ and Kisseberth (1970). Very recently, Bonney⁵ (1974) has argued that invoking the obligatory precedence principle (that is the precedence of obligatory over optional rules) and such well established constraints as Ross's Sentential Subject Constraint along with Intrinsic ordering, one can do without the principle of Extrinsic order.

-
- | | | | |
|---|---------------------------|--------|---|
| 2 | Koutsoudas, Andreas | (1974) | "On the Non-Sufficiency of Extrinsic Ordering, Indiana University Linguistic Club, Mimeo" |
| | " | (1972) | "The Strict Order Fallecy" Language 48, 1. |
| 3 | Lehman Twila | (1972) | "Some Arguments Against Ordered Rules" Language 48 |
| 4 | Kenstowicz and Kisseberth | (1970) | "Rule Ordering and the Asymmetry Hypothesis" Papers from the 5th Regional Meeting of Chicago Linguistic Society |
| 5 | Bonney, W L | (1974) | Oxford University D.Phil thesis |

However, there is no denying the fact that some order is necessary in generative transformational grammar for the derivation of some sentences and the blocking of some deviant ones. What is generally debated is whether the order is Extrinsic or Intrinsic. Order is extrinsic if it is explicitly stated as part of the formal properties of language. For example, EXTRAPOSITION is extrinsically ordered before PRONOMINALISATION, and this ordering is based on the assumption that there is a rule of pronominalisation which substitutes pronouns for full NPs, and that the rule which moves that clauses is Extraposition and that the movement is rightward.

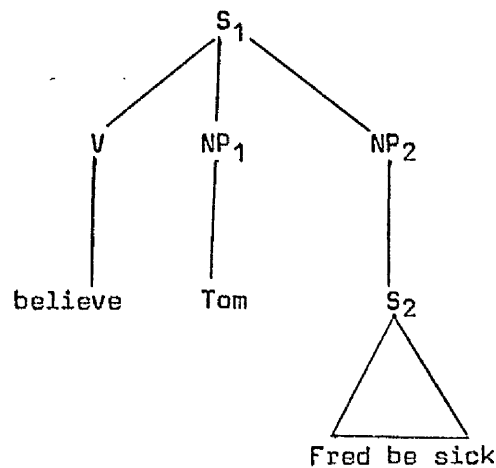
Bonney (1974: 85ff) points out that if the movement were leftwards, if for example, EXTRAPOSITION were replaced by Emonds rule of INTRAPOSITION (Emonds, 1969) the ordering argument would fail because one can still account for the data of the following 11(a) - (d) without any recourse to extrinsic order, in other words, 11(a) - (c) can be shown to derive from a common Base form, while 11(d) does not.

- 11 (a) That he was elected surprised Fred.
- (b) That Fred was elected surprised him.
- (c) It surprised Fred that he was elected.
- (d) It surprised him that Fred was elected.

INTRINSIC Order, on the other hand, is determined by the structure of the relevant trees and the structural description of the rules. For example, in standard analyses, there are many cases where the applicability of a certain rule is contingent on the prior application of some rule that creates an input structure for it. In English, for instance, SUBJECT RAISING creates the input structure for PASSIVE in the derivation of 12(a) from 12(b).

12 (a) Fred is believed by Tom to be sick.

(b)



The same applies for the ordering relationship between PASSIVE and AGENT DELETION in the derivation of 13(b) from 13(a):

13 (a) He was caught by the police

(b) He was caught.

So far as our investigation goes for the Igbo language, there has been no case where extrinsic ordering is required to ensure the blocking of some ungrammatical sentences of the language. Rather, it seems that no fixed order, except in the case of intrinsic ordering, as defined above, is necessary in the derivation of Igbo complement sentences. As we show in section 5.1.0 p.259ff, what happens is that some rules, if applied early in the derivation, result in an early termination of such a derivation, whereas the same rules, if left unapplied, make the derivation of whole paradigms sequentially possible. This situation obtains in cases where the (derived) structure meets the structural description for two possible rules, and the application of one rule yields one type of grammatical sentence, while the application of the other yields a stylistic variant of the same sentence.

But cases of intrinsic order are fairly common in the language. For example, EQUI-NP DELETION is an optional rule for those verbs which take the Subjunctive Complement (see chapter 8, 8.2.0 & 8.2.1).

But once this optional rule applies, it creates an output structure which becomes the input to the rules of Infinitivization and Complementizer Deletion. These two rules are, therefore, contingent on a prior application of EQUI. Similarly, the application of Pseudo Cleft creates an input structure for the rule of Relativization which has to apply, in some cases, vacuously, or else grammatical deviance is the consequence. Nevertheless, any order which we establish in this investigation can only be tentative, being specific to the construction type being investigated here - Noun Phrase Complementation.

THE PRINCIPLE OF THE CYCLE

The formulation of the principle of the Cycle depends crucially on an important fact about Transformational rules, namely, that they (the T - rules) are defined over sentence (s) nodes. Thus REFLEXIVIZATION and PASSIVE can apply only to nodes which are immediately dominated by the same S node, but EQUI, SUBJECT RAISING and NEG-RAISING are applicable only to structures in which one sentence is embedded in another. In most versions of TG, T - rules are also defined over strings such as NP (cf Chomsky 1972)

Convincing arguments have been brought forward in support of the principle of the Cycle in syntax - that is, the fact that some transformations, but not all, apply in a block, first, to the most deeply embedded sentence in a tree, then to the next sentence up the tree, and so on up to the main clause - more recently by Ross (1967 & 1969)⁶, Robin Lakoff (1969)⁷.

-
- | | | | |
|---|---------------|--------|--|
| 6 | Ross, J. R. | (1967) | Constraints on Variables in Syntax
Ph.D. Thesis. MIT. |
| | " " | (1969) | "On the cyclic nature of English
Pronominalisation" (Mimeo) MIT. |
| 7 | Lakoff, Robin | (1969) | "A Syntactic argument for Negative
Transportation" 5th Chicago Ling. Soc. |

Although Grinder (1972)⁸ has challenged this principle on the grounds that there are no primary motivations for it in the syntax of English, he, nevertheless, comes to the following conclusion:

"I wish to point out that while there are no such cases (cases of primary motivation for the cycle) it is not impossible that one could bring forth a number of second order arguments for the cyclic principle of rule application. George Lakoff, for example, has argued (in classes at the California Summer Linguistics Institutes, University of California, Santa Cruz) that given the cyclic principle, one can dispense entirely with extrinsic rule ordering. If a number of such arguments could be sustained, their cumulative weight could dictate a relatively unambiguous choice between the two alternatives." (Kimball (ed) 1972 p 110). Summing up Grinder's argument for an iterative (bottom to top) principle as a legitimate rival to the cyclic principle, Lakoff observes:

"In short, Grinder's paper provides us with some good reasons for maintaining the cyclic principle, though they are not 'primary motivations' in his sense." (Ibid p. 115) There is, therefore, very little doubt that the principle of the cycle has a strong basis in a transformational theory of language.

But there seems to be no need for such a principle in a transformational grammar of Igbo for the following reasons: One of the classic cases in favour of the cycle comes from the interaction between the Passive and Raising rules in English. But there is no Passive construction in Igbo, and so there can be no Passive rule in the language.

8 Grinder, John (1972) "On the cycle in Syntax" in Syntax and Semantics, Kimball (ed), Seminar Press, New York and London.

The nearest that one gets to a Passive construction is found in the following 14(a-c) with Indefinite pronoun subjects:

14 (a) É gbūru madhù
One killed person: A person was killed/
Lives were lost.

(b) Á m̄ara iwu: A law was made.

(c) É kwuru sí Ọ fūru ọg'ụ
One said that it resulted fight:
It is reported to have resulted in a fight.

Although there is some evidence of Raising in Igbo with a small subset of Emotive verbs, one cannot talk of the interaction of PASSIVE and RAISING in Igbo in the sense that one talks of the interaction of the same rules in the production of the following English sentences (Raising in Igbo is discussed in 5.2.1: 3/6ff).

- (d) Lucy believes that Harry kissed Maxine.
- (e) That Harry kissed Maxine is believed by Lucy (by PASSIVE)
- (f) Maxine is believed by Lucy to have been kissed by Harry.
(by PASSIVE-RAISING-PASSIVE)

In view of the fact that the notion of derived subject (see 14(f) where Maxine is the Surface Subject through RAISING though an underlying Object of the that clause in 14(d) and the notion of the cycle establishing the order as PASSIVE-RAISING-PASSIVE - are crucial to the derivation of 14(f), then, these two notions - derived Subject and the Cycle - do not seem to have a place in Igbo transformational grammar. Throughout this investigation, there has been no need to invoke these two notions in order to account for the derivational history of any Igbo sentence.

The other case that argues for the cycle is the interaction of PRONOMINALISATION and EQUI (Ross 1969) in the generation of the following English sentences:

15 (a) Discovering that he₁ was sick disturbed Harry₁

(b) Discovering₁ that Harry₁ was sick disturbed him₁

The chain of co-reference in 15(a) is that the terms he, Harry and the missing subject term of discover refer to the same individual, whereas in 15(b) the same co-referentiality cannot be established between the three terms. And the principle of the cycle is invoked to explain the two readings, though Postal (1972) has shown that PRONOMINALISATION is post cyclic. But unlike English, Igbo has two morphologically distinct third person singular pronouns, one of which is always co-referential thus:

(c) Ógù ícòfùta na yá tūrū ashí nà ewúte yā.

Ogu realising that he told a lie pains him.

(d) Ógù ícòfùta na Ȯ tūrū ashí nà ewúte yā.

Ogu discovering that he(someone else) told a lie pains him.

In 15(c) the yá pronoun is co-referential with the antecedent noun, Ógù, whereas the Ȯ form in (d) is not; furthermore the Noun Ógù and the pronouns yá or Ȯ cannot be switched. The problem does not therefore arise in Igbo.

While recognising the place of the cycle in the grammar of English, (Lakoff observes that "given the principle of the cycle and independently motivated analysis, all known cases of extrinsic ordering disappear" (Kimball (ed) op. cit. p. 114), such a principle seems to have no basis in Igbo syntax. Since these two rules (PASSIVE and RAISING) do not interact in Igbo, one cannot talk of their interaction with such minor rules as Reflexivization and There-Insertion.

5.1.0. NÀ NP-Complementation

Igbo NP sentential complements can be generally represented by the following Deep structure configuration in Fig. 2

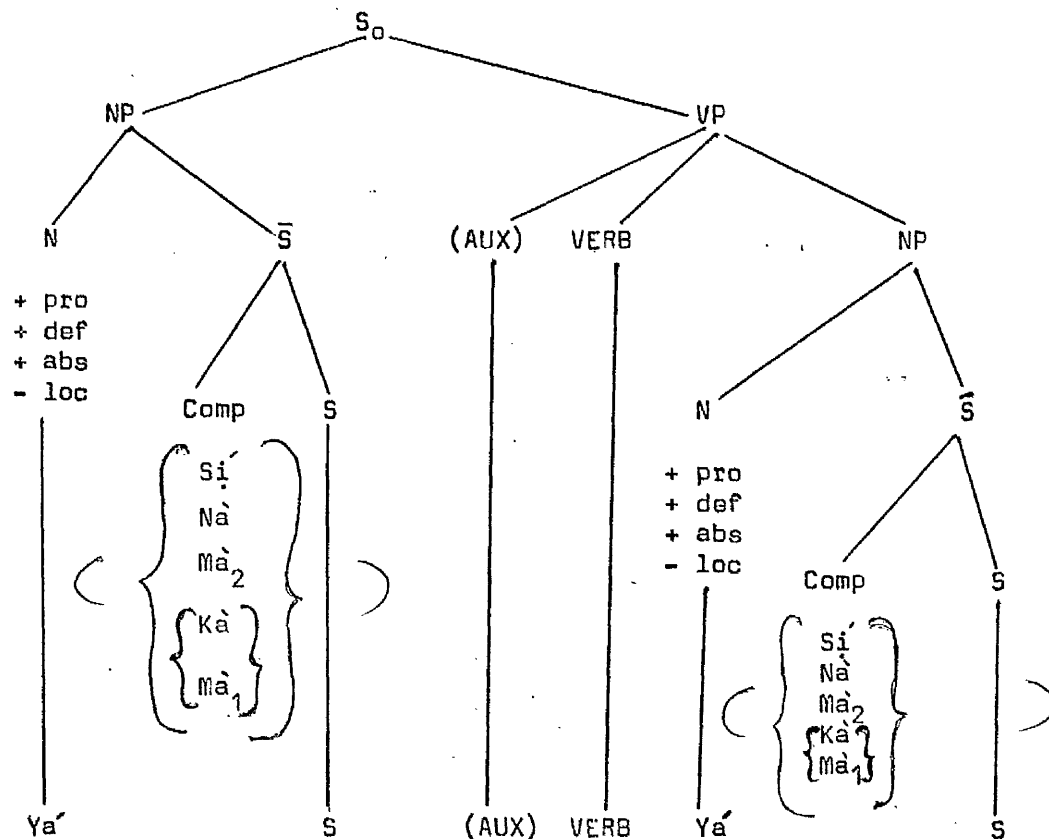


Fig. 2

The above figure shows that an NP-complement in Igbo is dominated by an NP node which is itself directly dominated by S (if it is in subject relation to the verb) or by VP (if it is in object relation to the verb). Let us begin our investigation into the process of Noun Phrase Sentential Complementation in Igbo by examining the steps involved in the formation of the following paradigm of Igbo sentences, beginning first with Subject, and then, Object NP-complements.

In other words, one does not need to go back to the Base Form in order to derive, say, 16(c) or (d), but can do so directly from structures (or at times well-formed sentences) which have been previously derived from the Base Structure. Admittedly, there is some rather subtle difference of meaning between 10(c) and (d) on the one hand, and 10(a) and (b) on the other. This difference is due to focus of emphasis brought about by the application of Pseudo Cleft. But this is a low order difference of meaning which does not disqualify the paradigms 16 and 17 being treated as such.

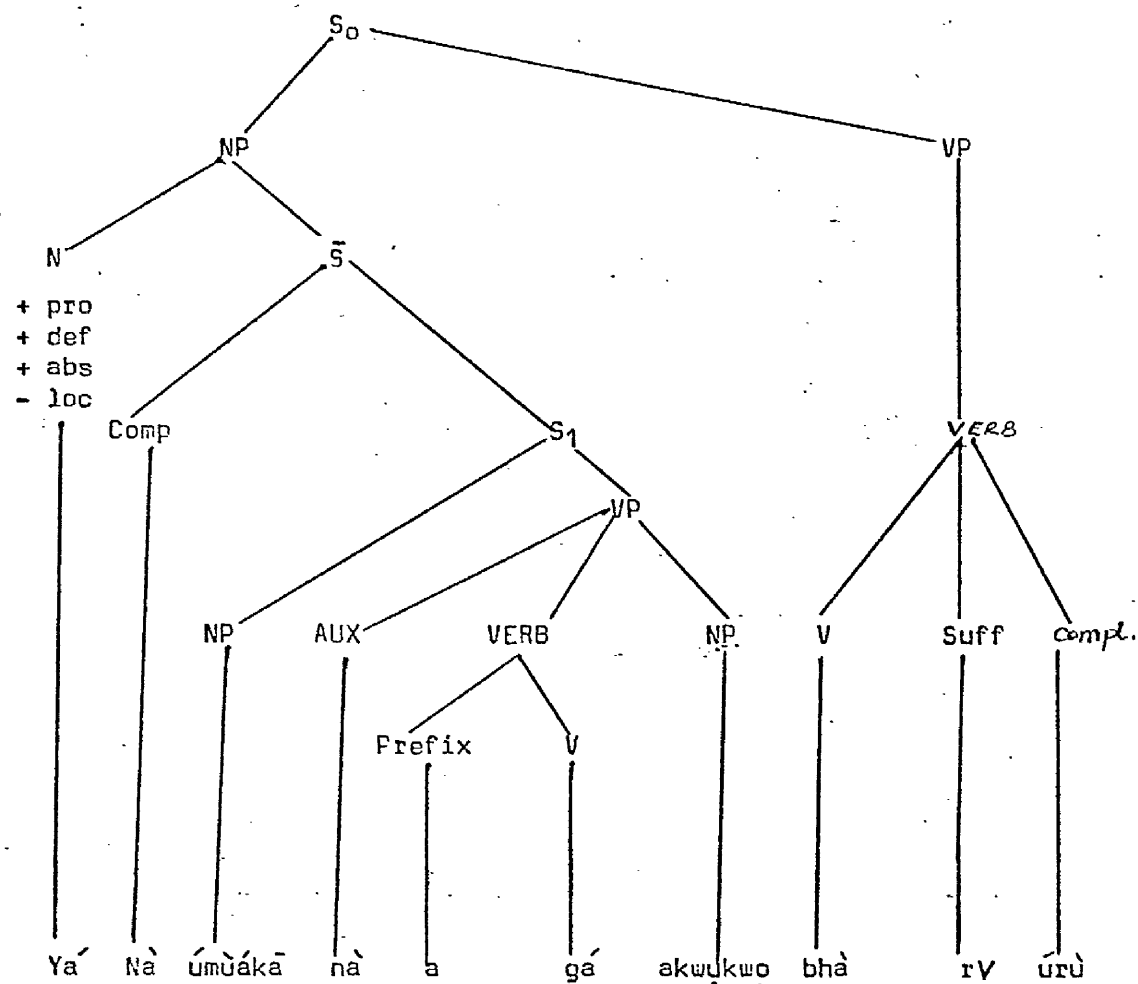


Fig 3

The application of only one T-rule - the Ya Deletion, and the relevant phonological rules yields the acceptable sentence 16(a).

(i) Ya' Deletion

SD:	<div style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px; display: inline-block;"> N - Comp S - + pro + def + abs - loc 1 2 </div>		VP - X	
	Np	NP	3	4

SC: Ø234 (opt.)

As the name, Ya Deletion, implies, this rule deletes the abstract proform ya', thus yielding 16(a) as the output:

16(a) Na' ūmūākā nà agá akwūkwo bhàra úrù.

If ya' Deletion applies, then no other rule is applicable; if it does not apply, other rules are applicable since their application depends on the presence in the structural description of the proform ya'. Assuming, therefore, that ya' deletion has not applied, we can go on to show how sentences such as 16(b-e) as well as 17(b-c) can be derived via the application of the rule of Extrapolation from subject, the structural description of which is given as follows:

(ii) Extrapolation from Subject

SD:	N -	Comp	S -	VP
	+ pro			
	+ def			
	+ abs			
	- loc			
	1		2	3

Process : attach 2 as the right sister of 3

Condition : optional

SC : 132

The output of the above rule is 18(a), which is not well-formed:

18 (a) Ya' bhàrə úrù na ùmùákā nà agá akwùkwò

At this juncture, we are faced with another choice between

- (i) Ya' to 0 conversion, or
- (ii) Ya' to hwe' " in Pseudo Cleft sentence formation.

The choice of the first alternative plus the application of the relevant phonological rules yield 16(b), while the second alternative, the Pseudo-Cleft rule - entails the substitution of hwe' for ya' and this makes the derivation of 16(c) - (e) sequentially possible. As was the case in the first set of choices, the selection of any particular rule depends on the particular member of the paradigm that one wants to derive, and not on any rigid order. Again, as with ya' deletion, the application of ya' to 0 conversion means that ya' is not available in the structural index for such other rules as Pseudo-Cleft which entail its substitution with hwe' - a process which is productive.

(iii) Ya' to 0 Conversion

SD:	N	-	VP	-	Comp	S
	+ pro					
	+ def					
	+ abs					
	- loc					
	Ya'					
	1		2		3	4
SC	$\begin{bmatrix} 1 \\ 0 \end{bmatrix}$		234			

The output of this rule is 18(b).

18 (b) 0' bhàrV úrù na ùmùákā nà agá akwùkwò.

18(b) becomes the surface sentence 18(c) by the application of the rule of vowel harmony and other PHONOLOGICAL RULES.

18 (c) Ǫ̀ bhàra úrù na ùmùákā nà agá akwýkwọ.

We now take up the second alternative above which involves the application of Pseudo-Cleft on the derived structure 18 (b).

(iv) Pseudo-Cleft Rule

SD:	N	VP	Comp	S
	Yá			
	1	2	3	

Process:

- (a) Insert wú before Comp S.
- (b) Substitute hwé for yá.

SC:	$\left[\begin{smallmatrix} 1 \\ \text{hwé} \end{smallmatrix} \right]$	2	wú	3
-----	---	---	----	---

The output of this rule is 18(d) which is by no means well-formed.

18 (d) Hwé bhàra úrù wú nà ùmùákā nà agá akwýkwọ.

Recall that in 5.0.1: p. 247, we justified the substitution of hwé for Yá in Pseudo-Cleft sentence formation on the grounds that hwé is a special member of an open class, and shares the same distributional relationship with yá, both of them being nominal items. The second reason for this substitution is that Pseudo-Cleft sentences in Igbo are precisely of the same syntactic characteristics as embedded Kèdú⁹ questions, (the Igbo equivalent of English WH - Questions):

9 Kèdú Questions are fully discussed in chapter 6 (6.2.0 p. 347-351) where it is further shown that hwé is substitutable for the interrogative word, gírí just in case it is being qualified by a defining or relative clause.

They are all Relative clauses, a conclusion arrived at from the syntactic characteristics of Igbo relative clauses. Since the output of EXTRAPOSITION is a structural configuration which meets the structural description for Pseudo-Cleft, and since Pseudo-Cleft is intrinsically ordered after Extraposition and entails the change of Yá to Hwé, we feel justified to relate the deep structure yá to hwé by means of a morphophonemic rule applying after the Pseudo-Cleft rule. Recall from section 5.0.1 p. 239, that a transformationally inserted hwé in Pseudo-Cleft rule application is *optional* with such matrix verbs as have inherent object, igbā àgụgụ 'to doubt' for example, for the simple reason that the deep structure yá is *optionally* present in the surface. Pseudo-Cleft transforms of their complements. It is generally the case that whenever ya is sentence - initial in the type of construction being considered here, it must undergo one of the following morphophonemic rules:

(i) Yá to 0 Conversion

OR

(ii) Yá to hwé Conversion, if it is followed by a qualifying structure.

Observe that as a result of the insertion of the copula wú in Pseudo-Cleft sentence formation, the relation of the subject hwé to the following deep structure VP¹⁰ bhàrý úrù now becomes that of head and modifier.

10 That the embedded sentence S₁ above is realised at the surface as a VP is proved by the fact that this VP can be modified thus:
Hwé bhàra urù nke úkwu wú nà úmụákā nà agá akwụkwọ
 What is very useful is the fact that the children do go to school, where nke úkwu is an adverbial modifier.

In other words, the application of the Pseudo-Cleft rule to an Igbo complement structure has the effect of converting the underlying matrix structure into a complex nominal of a head and modifier. This fact is best brought out by the following tree diagram of Fig. 4 which represents the output of the Pseudo-Cleft rule. The obligatory application of the appropriate Tone rules (cf 3.6 p.155-163), ensures, among other things, that the tone pattern associated with Igbo relative clauses is established. The output of Pseudo-Cleft rule in Igbo is subject to the Tone rules which belong to the phonological component of grammar. It is the application of such rules that yields 18 (e):

18 (e) Hwé' bhāra urù wú nà ùmùákā nà agá akwùkwò.

And 18 (e) is the same as 16 (c).

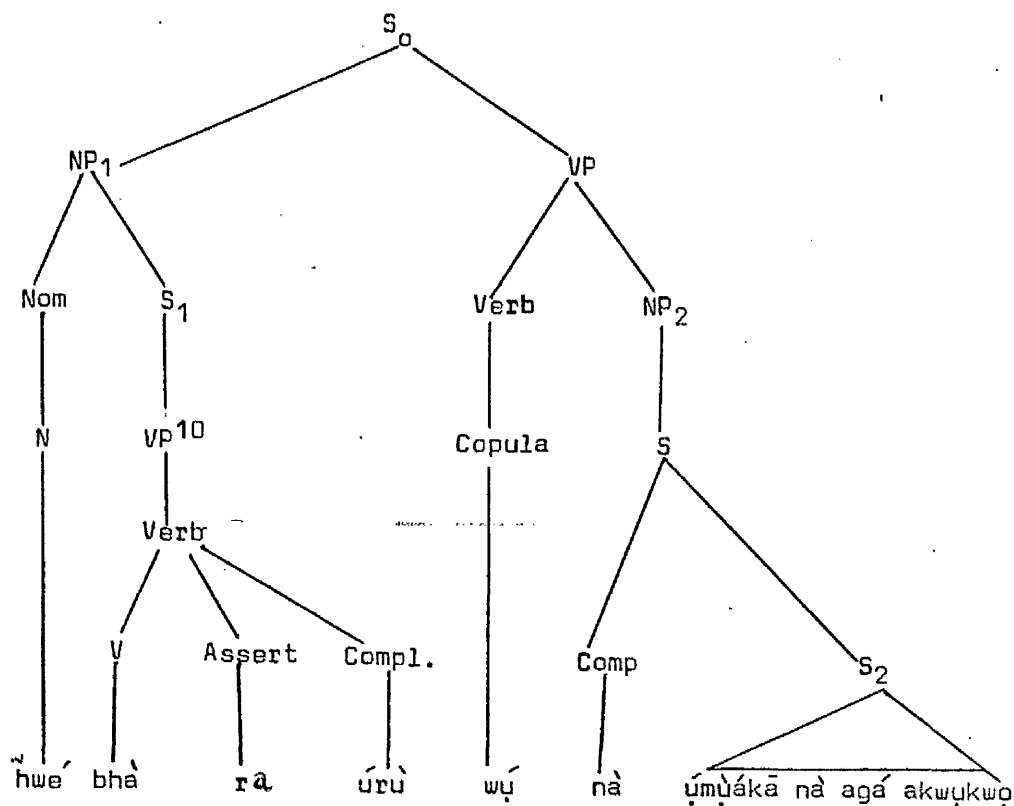


Fig. 4

Although the process of relativization is, strictly speaking, outside the scope of this investigation, yet a word ought to be said about it here, since, at least, some of the rules associated with that process in Igbo are relevant to the output of Pseudo-Cleft. Relativization demands the presence of two co-referential NP's in its structural description; it is the deletion of one of these two co-referential NP's (that dominated by the embedded S) that triggers the following rules:

- (1) Relative Deletion, then
- (2) Object NP Movement (the Igbo equivalent of Eng WH - movement)
- (3) Either Ná Aux Attachment (Morphophonemic rule)
Or -rV Infixing "
- (4) Tone Rules (Phonological rules)

Rules 1-3 are given and discussed in the following pages 267-74, while Tone rules form the subject of chapter 3, (cf especially 3.5 & 3.6, (p. 140-163).

However, not all relative structures are subject to all these rules of relativization, since there are specific conditions for their application, and these are specified after each rule.

But in the derived structure of Fig. 4, there are no co-referential NPs as one would expect from relative structures. Rather, what we have is a tree diagram which corresponds to the output of Relative deletion on a putative structure such as 18 (f').

18(f')
$$\left[\begin{array}{c} \text{NP} \\ \text{Hwé}_1 \end{array} \right] \left[\begin{array}{c} \text{s} \\ \text{Hwé}_2 \text{ bhàrV úrù} \\ \text{s} \end{array} \right] \left[\begin{array}{c} \text{NP} \\ \text{wú ná úmùákā ná agá akwukwò} \end{array} \right]$$

When Relative Deletion applies to delete Hwé_2 under identity with Hwé_1 , we get the structure represented in Fig. 4.

What seems to happen is that the application of EQUI on a Relative structure and of Pseudo-Cleft on a complement structure produces two derived structures which are similar, if not identical.

Perhaps, the hypothesis of TARGET STRUCTURES might throw some light on this apparently strange coincidence. The phenomenon of target structures has been noted in Generative Phonology (Ross 1969, Kisseberth 1969 (a) & (b), Kim 1969), and in Generative Semantics (Lakoff 1969 (a) & (b), and Green (1970)). This hypothesis states that "Each language has a relatively small set of Target Structures - a set of constraints which apply at some relatively superficial level, as a sort of filter on derivations." Awoyale (1974: 1 - ff) tries to account for the multiple ambiguity of Yoruba Gerundive constructions by invoking the above hypothesis. What is interesting about his account is that the two structures relevant to the derivation of Yoruba Reduplicated Gerundives are Relative and complement structures, the same types of structures involved here. In view of the fact that Igbo and Yoruba belong to the Kwa group of Languages, it is possible that the phenomenon being described about Yoruba also obtains in Igbo where EQUI on Relative constructions and Pseudo-Cleft on complements produce identical structures which are subject to the same rules of relativization.

Whatever may be the demerits of the Target Structures hypothesis, it is clear that the output of Pseudo-Cleft on complement structures is subject to the same rules as the output of EQUI on Relative structures, and at the surface they are all relativized clauses in spite of their different deep structure origins. Let us take the well-formed sentence 18 (e), for example:

18 (e) Hwé' bhāra urù wú' nà' úmuákā' nà' agá' akwúkwo

Any appropriate lexical item can be substituted for hwé in the above sentence, and the result still remains a well-formed relative construction in Igbo, thus:

(g) Àtumatŭ' bhāra urù wú' nà' úmuákā' nà' agá' akwúkwo

The plan which is useful is that children are going to school

(h) $\left\{ \begin{array}{l} \text{Úka} \\ \text{Okwu} \end{array} \right\}$ bhāra urù wú' nà' úmuákā' gá' agá' akwúkwo

Talk which is useful is that children will attend school:

The useful proposal is that children will attend school.

Although it is a fact that, in some cases such as 18(e), only Rule 4 - the rule which generates relative clause tone patterns - is applicable, (and this may be seen as a phonological rule) in other cases which we shall show shortly, all the other rules consequent on EQUI, that is, Rules 2-4, are applicable. There is, therefore, sufficient syntactic evidence to justify the claim that the output of the Pseudo-Cleft rule in Igbo is the input for obligatory relativization.

Having argued the case for relativization in Igbo NP complementation, let us now complete the derivation of paradigm 16.

To the well-formed sentence 18(e), we may now apply the following two optional rules in the order given, the order being intrinsically determined:

(a) Nominalisation of the Nà complement and

(b) Reverse Cleft.

To nominalise 18(e), we need to apply Rule 2 of the Rules of Relativization which entails the movement of the object NP to a position where it functions as head of the resultant relative clause.

As a consequence of this movement rule (which is the Igbo counterpart of English WH- movement) the Complementizer has to be obligatorily deleted.

(v) Nominalisation of NÀ Complement (T-Relat₂ optional)

Via

	Object	NP	Movement						
SD	:	NP	COPULA	COMP	NP	[_{vp} VERB	NP	vp]	
		1	2	3	4	5	6		
Process	:	(a)	Attach 6	as the right	sister of	2			
		(b)	Delete 3						

This rule is optional, and lexically specified for factive predicates.

SC : 1 2 6 Ø 4 5

The output of the above rule is 18(h), which is the same as 16 (d)

18(i) Hwé' bhāra urù wú akwụkwọ ụmụákā nà agá.

Thing which is useful is schooling children are doing:

What is useful is the fact that the children are schooling.

Thus, the effect of nominalisation on Igbo Nà Complements is the same as the application of Pseudo-Cleft as discussed above - both rules result in the formation of relative clauses, and this is why we describe this nominalisation rule as Relativization (Relat₂), which is lexically specified for factive predicates as opposed to Relat₁, which is a consequence of the application of Pseudo-Cleft - a much more general rule. In other words, while all categories of Igbo NP complements may undergo Relat₁, only a small sub-category of Nà complements are subject to the optional rule of Relat₂.

The nominalisation of some Na` complements bears out our earlier assertion that complementation is but one subset of a general syntactic process called - NOMINALISATION, relativization being another (cf 5.0.1: P. 247). Such nominalised forms as 16(d) and 18(h) are the Igbo equivalent of the English expression 'the fact that'. The syntactic justification for the distinction into Factive and Non-factive Na` clauses is given in 5.1.2. P. 279-91.

The next optional rule which 18(i) can undergo is the Reverse Cleft rule, and this accounts for 18(j). We give a tentative formulation of this rule as follows:

(vi) The Reverse Cleft Rule (optional)

SD	:	NP ₁	COPULA	NP ₂
		1	2	3

SC	:	3 2 1
----	---	-------

Condition : Both NP₁ and NP₂ must be of the structure
NP N S , that is a complex nominal. The

output of the above rule is 18(j), which is the same
as 16 (e)

18(j) Ákwúkwo òmùákā nà agá wū ñwe bhāra urù.

The fact that the children are schooling is something useful.

In the foregoing examples, we have explored the form and order of application of the T-rules in the generation of sentences such as 16(a-e). The order which has been established from successive well-formed derivations of the language is fundamentally intrinsic, and need not be stated explicitly because a T-rule which depends for its application on the output of a previous rule cannot have its structural description met until the relevant rule has applied. In some cases, we have had to operate on a system of choice of one rule or the other,

And we have pointed out how the application of the one rule terminates a derivation, while the selection of the other leads naturally to the derivation of other sentences of the paradigm.

The choices involved are the following:

- (1) Either (a) Ya' Deletion
Or (b) Extraposition
- (2) Either (a) Ya' to 0 Conversion (Morphophonemic)
Or (b) Pseudo-Cleft.

The choice of 1(a) results in a derivational 'cul de sac' while the choice of 1(b) opens the way to the second choice - that between 2(a) & (b). As with 1(a), the selection of 2(a) terminates the derivation, while the 2(b) option leads on to the generation of other stylistic variants of the paradigm.

Most of the stylistic variants of 16(a-e) depend crucially for their derivation on the presence of Ya' in their structural description; if this abstract proform is deleted early in the derivation, then it has to be re-introduced transformationally in order for the derivation of other variants to be possible. But to delete it and then re-introduce it through a transformation is not only circular, it constitutes a negation of the gain in economy which its generation in deep structure guarantees. For this reason, we have adopted an ordering system that ensures its presence in the derivation for as long as is necessary.

But the reader must not go away with the impression that the rules given below are strictly ordered. As a matter of fact, the T-rules are unordered; but for intrinsic reasons, the only derivations possible will be those which conform to the following scheme:

Either 1. Yá' Deletion (T - Yá' Del.)

Or 2. Extraposition (T - Extrap.)

If 2. Then

3. Pseudo-Cleft (T - Pseudo-Cleft)

4. Relativization of Matrix S (T - Relat₁) oblig.

5. Nominalisation of Na' Comp. (T - Relat₂) opt.

6. Reverse Cleft (T - Reverse Cleft) opt.

7. Yá' to 0 Conversion (Morphophonemic)

Before we go on to see how many of the above T-rules are applicable in the generation of the Object NP complements given in paradigm (17), let us, first, give more examples of Nà Subject NP complement and their derivational history, the aim being to show how the generation of various /pes of Subject NP complements results in the application of additional rules.

19(a) $\left[\begin{array}{c} \text{Yá} \\ \text{NP} \end{array} \left[\begin{array}{c} \text{s} \\ \text{NP} \end{array} \begin{array}{c} \text{nà} \quad \text{yá} \quad \text{ezuhii} \quad \text{oñi} \end{array} \right] \right] \text{wère} \quad \text{ánya} \quad (\text{Base})$

(b) Yá wère ánya ná yá ežuhii oñi (By T-Extrap)

(c) Ó wère ánya ná o žuhii oñi. (By Ya to O applying to
It is obvious that he did not steal. both Matrix & Compl.
structures)

(d) Ó wère ánya ná o žuhii oñi. (By Phonological rules)

19(d) is a grammatical sentence of Igbo.

Now starting with 19(b) and applying Pseudo-cleft, we can derive 19(h) through the following stages:

19(e) ĥwé wère ánya wu ná yá ežuhii oñi (By opt. Pseudo
Cleft).

(f) ĥwé wère ánya wu ná yá ežuhii oñi (By T-Relat₁.oblig.)

(g) ĥwé wère ánya wu ná o žuhii oñi. (by T-Yá to O) (oblig).

(h) ĥwé wère ánya wu ná o žuhii oñi. (By Phonological rules).

What is obvious is that he did not steal. 19(h) is a well-formed
Igbo sentence.

From 19(h) we derive 19(j) through the following stages:

(i) by the application of the Object NP Movement rule given on page 267,
we get 19(i) from 19(h).

19(i) ĥwé wère ánya wu oñi o žuhii

19(i) is not well-formed and therefore unacceptable in the dialect
being described. To it we must apply Rule 3(a) of the Rules of Relativization-

The Ná aux attachment rule, in order to derive 19(j)

These rules are given as follows:-

(a) NA AUX. ATTACHMENT - (Morphophonemic

SD : NP COPULA $\left[\begin{array}{c} \text{NP} \\ \text{NP} \end{array} \right] \left[\begin{array}{c} \text{NP} \\ s \end{array} \right] \text{VERB} \left[\begin{array}{c} \\ s \end{array} \right] \text{NP}$

1 2 3 4 5

Process : attach the Na aux. element as the left sister of 5.

Condition: obligatory, and 5 must be a Negative Verb form.

SC : Either 1 2 3 4 Na' 5

Or 1 2 3 Na' 45 if 4 is the monosyllabic Pronoun

0 or A. The output to this rule is 19(j), which is provided for by the above structural change.

[illegible]

thing which is obvious is theft which he did not steal:

What is obvious is the fact that he did not commit any theft.

Now, suppose that our underlying verb in the above rule were in the Perfect form, rather than in the Negative. In that case, we would apply the -rV - INFIXING rule as a second alternative to the Ná aux. attachment. Because this -rV - infixing rule presupposes that the rule of Affix Hopping, that is, the rule which organises the constituents of the verb, has not yet applied, we provide for it in the following rule:

(b) The -rV- INFIXING RULE (Morphophonemic)

SD: NP COPULA NP $\left[\begin{array}{c} \text{NP} \\ \text{NP} \end{array} \left[\begin{array}{c} \text{Prefix + V + LA} \\ \text{verb} \end{array} \right] \right]$ NP

1 2 3 4 5 6 7

Process: Either attach Na as the left sister of 5 6 7 verb

Or insert -rə - as infix before 6 and 7 and delete 5
if the preceding NP is not /0./

Condition: The above rule is obligatory, and the verb must
 be in the Perfect Form.

[illegible]

Note that if the NP of the relativized clause were any nominal rather than the third person pronoun, O, or the second person I only two variants would be possible as 19(1) shows:

[illegible]

What is obvious is the fact that Oqu has stolen.

To the above 19(k) and (l) and sentences of their type, the optional rule of Reverse Cleft (see page 37) can apply to yield sentences such as 19(m) and (n):

19(m) Ōhi { ná ò žuone
 { ó na èžuone
 { o žūrune

wú ħwe wēre anya.

The theft which he has committed is what is obvious.

19(n) Ōhi { Ogu' ná' èžuone } wú ħwe wēre anyā.
 { Ogu' žūrone }

The theft which Ogu has committed is what is obvious.

A brief discussion of these rules is necessary here since the derivation of sentences like 19(j-n) introduces some new elements in the structural index of the Na' complement Nominalisation rules. First, we must not confuse the Na' auxiliary element with the Na' complementizer; although they are featurally related, they are, nevertheless, distinct in their syntactic behaviour. A detailed discussion of the Na's in Igbo and their relationship with one another has been given in 10.4.0-10.4.5. It was also pointed out (cf 2.4.5) that in all Relative Clauses, whose verbs are in the negative, the Na' Aux. element is obligatory. It is facts such as these which the foregoing rules are designed to capture.

Secondly, with these two rules - Na' Aux attachment and -rV - INFIXING - now given, we have completed the list of rules necessary for characterising Igbo relative clause formation. As we have previously pointed out, (cf p.264), these rules are consequent on a prior application of Relative Deletion to an underlying relative structure, thus:

- | | | |
|--------|---------------------------------|--------------|
| (1) | Relative Deletion (T-rule) | (obligatory) |
| (2) | Object NP Movement | " |
| (3)(a) | Either Na' Aux attachment | Morphopho- " |
| | (b) Or -rV - INFIXING | nemic rules |
| (4) | Tone Rules - Phonological rules | " |

These rules are intrinsically ordered, since the application of one creates an input structure for the application of the other. Whenever we talk of Relativization with regard to Igbo complementation, we shall specify which of the above set of rules is or are applicable. Bearing in mind that Relative Deletion never applies in the relativization of Igbo NP complements, for reasons which we have given on pages 264-6, we should point out that only rules 2-4 above are relevant here in NP complementation, and from the derivational history of sentences such as 19(j-1), all the rules 2-4 are needed for the following reasons

- (a) the NP to be qualified is in object position and therefore needs the object NP Movement rule which is the Igbo equivalent of the WH-Movement rule in English
- (b) the verbs involved in the Na' complements are either in the Negative or in the Perfect form, hence the need for either Rule 3(a) or (b);
- (c) the Tone-rules are needed in relative clause formation to ensure the right tonal relationship among the constituents of the relative clause. This subject is fully discussed in 3.6(p.155ff).

5.1.1 Object NP-Complementation

In 5.1. p. 257, we gave the following paradigm of object NP complements:

20(a) Ǫgú anúna ná ĥá byàra abyá

Ogu has heard that they did come.

(b) ĥwe { Ǫgú nùruna } wú ná ĥá byàra abyá
 { Ǫgú ná anúna }

What Ogu has heard is that they did come.

(c) ĥwe { Ǫgú nùruna } wú ɔ̀byibyá ĥa byàra
 { Ǫgú ná anúna }

What Ogu has heard is coming they came:

What Ogu has heard is the fact that they came.

(d) ɔ̀byibyá ĥa byàra wú ĥwe { Ǫgú nùruna }
 { Ǫgú ná anúna }

The fact that they came is what Ogu has heard.

The paradigm 20(a)-(d) derive from the following underlying structure -21.

21. Ǫgú anúna yá [[ná ĥá byàra abyá]]
 s s
 NP NP

20(a) derives from 21 by the application of the yá Deletion transformation. But as has been pointed out in 5.1.0, the early application of this rule can only yield sentences of the 20(a), and not any of the other types in 20(b)-(d). For this reason, we move on to show how these other variants can be derived from the same 21.

The underlying form 21 is not subject to ETAPPOSITION, since the NP complement is already in object position. Yet the transformations which produce 20(b-d) from 21 depend crucially on a sentence-initial Yá proform, a fact which necessitates the following movement transformation called Yá Movement rule.

THE YA MOVEMENT RULE

SD	:	NP	VERB	[YA NP	Comp	S NP
		1	2	3	4	5

Process : Move 3 to sentence-initial position.

SC : 3 1 2 4 5.

The output of this rule is 21(a), which is not well-formed.

21(a) Ya' Ogu' anuna na ha' byara abyá.

From 21(a) we derive 21(b) by an obligatory application of Pseudo-Cleft, which, with Subject NP complements is an optional rule. (see 5.1.0:261).

21(b) hwe' Ogu' anuna wu na ha' byara abyá.

Now 21(b) will obligatorily undergo the rule of Relativization - Relat₁ before it can become well-formed. The specific rule of Relativization relevant here are Rules 3 and 4 - that is, the Na'aux or the -rV- INFIXING and Relative clause Tone pattern rules respectively (see 5.1.0:272).

The sequential application of these two rules yields the sentence 21(c) or 21(d).

21(c) hwe' Ogu' na anuna wu na ha' byara abyá.

21(d) hwe' Ogu' nuna wu na ha' byara abyá.

Both 21(c) and (d), are the same as 20(b).

It is necessary to point out that the same intrinsic order is very much in evidence here. For example, the Ya movement rule creates an output structure to which Pseudo-Cleft is obligatory, and as we have seen in the previous section, relativization is both obligatory and contingent on a prior application of the Pseudo-Cleft rule.

Optionally, Nominalisation may apply to 21(c) or (d) to yield 21(e). But nominalisation in this case will proceed in two stages, viz: first a movement rule like that already given in 5.1.0. p. 267, and the second, a lexical substitution transformation:

The Verb-Complement Movement Rule

SD	:	hwe'	Ogu'	nuruna	wu'	na'	ha'	byara	abya'
		N	NP	Verb	copula	comp	NP	verb	compl.
		1	2	3	4	5	6	7	8

Process: (a) attach 8 as the right sister of 4

(b) delete 5

SC	:	1	2	3	4	8	∅	6	7	⇒	21(e)
21(e)		hwe'	Ogu'	nuruna	wu'	abya'	ha	byara			

But 21(e) is not a well-formed Igbo sentence because the item abya' is a verb complement¹⁰ which has no existence independent of the intransitive verb to which it is bound in structure. This output would have been perfectly well-formed if 7 in the above structural description were a transitive verb, in which case its noun object would be moved into a position where it becomes the head of the resultant output which is a relative clause. The following lexical substitution rule is therefore necessary to ensure the well-formedness of 21(e).

The Lexical Substitution Rule

SD	:	hwe	Ogu	nuruna	wu	abya	ha	byara
		N	NP	Verb	copula	compl.	NP	Verb
		1	2	3	4	5	6	7

Process : Substitute an appropriate derived nominal for the verb-complement, 5.

SC	:	1	2	3	4	$\left[\begin{smallmatrix} 5 \\ \text{byiabya'} \end{smallmatrix} \right]$	6	7	⇒	21 (f)
----	---	---	---	---	---	---	---	---	---	--------

¹⁰ cf with the verb-complement string given by the Ps-rule 4 in 4.2. Two types of verb-complement need be recognised in Igbo:

- (a) free verb complements such as those given in 4.2, these are lexical items of Igbo which merely specify the meaning of neutral verbs (cf footnote 11, 4.2 4.2 p.205).
- (b) bound verb-complement after intransitive verbs such as the underlined in the following examples:
 - i) g' nwuru anwu . He died.
 - ii) g' jhere ejhe' . He did go
 - iii) g' lora alo . He did return.

21(f) ńwé' Ogu' nùrùna wú' òbyibya' ńa byàra.

thing which Ogu has heard is coming which they came:

What Ogu has heard is the fact that they came.

By applying the optional rule of Reverse Cleft, we derive 21(g) from 21(f).

(g) Òbyibya' ńa byàra wú' ńwé' Ogu' nùrùna.

The fact that they came is what Ogu has heard.

We must point out that the details of Nominalisation in Igbo are by no means clear yet, since this syntactic process has not been studied in the language. The rules given in this chapter with regard to Nominalisation must be seen as tentative. It seems that there are some semantic constraints on Nominalisation which are not yet clear to us; for example, some matrix verbs do not permit the nominalisation of their sentential complements, while factive verbs generally do so, and the output of such a process is a relative clause. We shall take up the Factive - Non-factive distinction in 5.1.2.

From the foregoing examination of the process of object NP complementation, we establish the following set of intrinsically order rules:

- | | | | |
|------------|-----|----------------------------|--|
| Either | (1) | Ya' Deletion | (T-Ya - Del. oblig.) |
| Or | (2) | Ya' Movement | (T-Ya movement) (opt.) |
| If 2, then | (3) | Pseudo Cleft | (obligatory here, but optional with
Subject NP complements) |
| | (4) | Relativization of Matrix S | (T-Relat ₁) obligatory |
| | (5) | " " | Complement S (T-Relat ₂ optional) |
| | (6) | Reverse Cleft | (optional) |

A comparison of this set of rules with that given in 5.1.0: 370 shows some interesting similarities as well as differences. It will be observed from either set that we begin with a choice, an Either - Or - situation. In either case, the first option leads to a derivational blind alley, whereas the second choice opens the way to the generation of other semantically related sentences. It is interesting to note what the Ya' movement

rule does for object complements: It moves Y_a' to such a structural position as to make the derivation of other members of the paradigm 17(a-c) and 20(a-d) possible; in other words, such a movement transformation results in a derived structure similar to the Deep structure of subject NP complements. Coming as it does, as the second of the set of rules, it means that subject NP complements are marked for Extra-position, while Object NP complements meet the structural description for Y_a' movement. While Pseudo Cleft is an optional rule for Subject complements, it is obligatory for Object complements. After these few differences and similarities, the two sets of rules fall together in their order and conditions of application. We, therefore, set up the following intrinsically ordered rules for both subject and object Na complements in Igbo:

- | | | | |
|------------|-------------|------------------------------|--|
| Either (1) | Ya Deletion | (T- Y_a' Del) | (oblig for Subj NP Compl) |
| OR | (2) | Extraposition | (T-Extrap) opt. for subject NP compl. |
| | (3) | Ya Movement | (T- Y_a' move opt.(for object compl.) |
| | (4) | Pseudo Cleft | (T-Pseudo Cleft (opt. for subj. NP compl.) |
| | | | (oblig " obj. NP compl.) |
| | (5) | Relativization of Matrix S | (T-Relat ₁ oblig) |
| | (6) | Nominalisation of Na' Compl. | (T-Relat ₂ opt) |
| | (7) | Reverse cleft | (T-Reverse Cleft opt) |
| | (8) | Y_a' to 0 conversion | (T- Y_a' to 0 oblig) |

5.1.2 The Parameters of NP complements: The factive and Non-factive distinction.

The Kiparsky's (1971) provide a set of syntactic evidence in support of the above distinction for English viz:

- (i) Complement-taking predicates divide on semantic grounds into factives and non-factives, and on the strength of this, they assign two distinct base structures to explain the syntactic differences between these two classes.
- (ii) The S-ing complementizer occurs only with factive predicates,

and is the result of a transformation which applies only to factives, and not, as Rosenbaun (1967) had assumed, of a Complementizer Placement transformation.

- (iii) Although some to + infinitive constructions originate from underlying for-to complements by the deletion of for, this is not the only source of such constructions in English. A lot of to + infinitive constructions are the output of Equi-NP deletion or Subject-Raising
- (iv) The distinction between for-to and that complements reflects the semantic differences between Emotive and Non-Emotive predicates.

The factive and non-factive distinction is a semantic one, though it has its syntactic reflexes: Factive predicates entail the truth of their complements, while non-factives do not. Among the predicates which take object complements, regret and resent are factive, while believe and say are non-factive. Thus, whereas the complements in 22 are presupposed to be true, those in 23 are not.

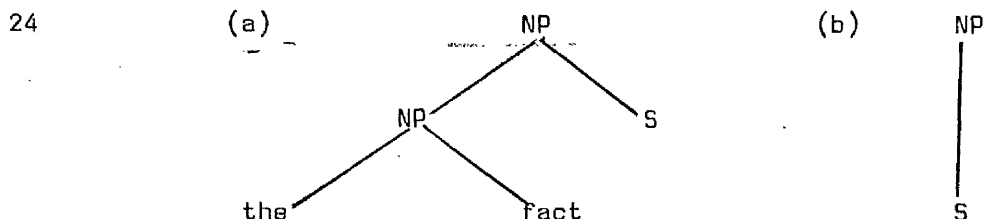
22(a) I regret that it is raining at this time.

(b) I resent the fact that he is so rude to me.

23(a) I believe that he is guilty of murder.

(b) He says that he has been to his doctor today.

Since this semantic difference is associated with syntactic differences, the Kiparsky's propose to account for these facts by means of two distinct base structures, 24(a) for factive and 24(b) for non-factive complements.



As the Kiparsky's further point out, the factive/non-factive distinction is not the only valid one that can be made. There are also what they describe as emotive and non-emotive verbs, a distinction which cuts across the factive/non-factive one since some emotive verbs are also factive.

Emotive verbs "include in general all predicates which express the subjective value of a proposition, rather than knowledge about it or its truth value", (Paul and Carol Kiparsky 1971 p.363). In view of the fact that such emotive verbs as embarrass and annoy are factive and therefore entail the truth of their complement, the Kiparsky's description of emotives is not strictly true. Emotive predicates are discussed in section 5.1.3.

How do all these distinctions apply to the Igbo language? In order to answer this question, we need to point out that of all the categories of NP-complements which our investigation has revealed, it is only the Na-complements which can be factive if their matrix predicates are factive. The other three categories - the Interrogative, the Subjunctive and Imperative complements - are all associated with non-factive predicates. This semantic compatibility is to be expected from the fact that, apart from Na-complements, the other categories lack a propositional contents, in other words, none of them makes any explicit claim, be it true or false, about the truth value of their respective complements. For example, Interrogative complements ask for information, the subjunctives express desires et cetera, and Imperatives issue orders.

If the Na complement is the only category which may be factive, how does one distinguish a factive Na complement from a non-factive one? For one thing there is no such Igbo expression as the fact that, which in English serves to distinguish factive from non-factive complements in base structure (cf 24(a) & (b)).

Nevertheless, this necessary distinction is possible in Igbo since lexical items form part of the deep structure of any language. Because factive predicates will have as part of their lexical entries the feature specification $[+ \text{fact}]$, this provides the information as to factivity or absence of it, though not in a configurational way as in English.

In order to discover the syntactic evidence in support of the factive/non-factive distinction in Igbo, let us start by examining the following predicates in 25 and the complements which come after them.

- | | | |
|-----|----------------|-------------------------------|
| 25. | íwùtè | to bother, worry |
| | íme ihwéré | " shame, embarrass |
| | íkpa ùhwa | " be pleasant, delight |
| | itò obi ùtò | " give joy, pleasure, delight |
| | ìgbagwòju ánya | " confuse |
| | íme n'anya | " happen in the presence of |
| | íwè ánya | " be obvious |
| | íwè iwè | " annoy. |
| 26. | ímá | " know |
| | ímata | " recognise |
| | ìcòfùta | " discover, find out |
| | ìzhì | " show, demonstrate |
| | ìgòshi | " " " |
| | ìcètè | " remember, recollect. |

(25) and (26) above represent two sample lists of factive predicates:

Those in (25) take sentential subjects, while those in (26) take sentential object complements. For each of the predicates in (25) the following types of sentence 27-28 are possible:

27(a) Na' ára gbára ya wùtèrè m'.

That madness ran him/her pained me: That he/she went mad pained me.

(b) Ára gbára yā wùtèrè m'.

Madness which ran him/her pained me: The fact that she/he went mad pained me.

28(a) Na' dímkpá a' tūru áshì gá emé ihwéré

That responsible man this told lie will be shameful

That this responsible man lied will be shameful.

28(b) Àshí́ dímkpá́ à turu ga emé ihwéré.

Lie which responsible person this told will cause shame:

The fact that this responsible man told a lie will be shameful.

The transformational processes involved in deriving 27-28(a & b) have been discussed in 5.1.0 and 5.1.1. The T-rule responsible for 27(b) and 28(b) is what we have characterised as Nominalisation of Na complements (T-Relat₂; page 267ff).

With the verbs of 26, which take object complements, the situation is not as clear cut as it is with those of 25. The reason is that some of these verbs require the item màka in their relativised Na complements, while some do not. For example, the Epistemic verbs -

íma to know

ímata " recognise, realise

behave in this way, as 29(a) and (b) show:

29(a) Ónye òwulá ma na ó wū onye oñí.

Everybody knows that he/sh is a thief.

(b) Ónye òwulá ma maka ónye oñí ó wū.

Everybody knows about the fact { of his being a thief. }
{ that he is a thief. }

The verb ícofuta behaves like the epistemic verbs, too, in requiring an obligatory màka in the relativized form of its na complement. But other verbs in the group do not do this, their complements relativize like the complements of the predicates in 25 thus:

30(a) Ógu écètele ná Nwúg'ò kwára ikho.

Ogu has remembered that Nwug'o committed adultery.

(b) Ógu écètele ikho Nwúg'ò kwára.

Ogu has recalled the fact that Nwug'o committed adultery.

Now contrast the well-formedness of the foregoing 27(b), 28(b), 29(b) and 30(b) with the deviance of the following 31(b), 32(b), 33(b), & 34(b) in which the Na complements have been relativized:

31(a) Anyị́ gú́tara na Ògù wú onye àma .

We read that Ogu is a traitor.

(b) *Anyị́ gú́tara maka ónye àma Ógù́ wū .

32(a) Anyị́ kwere na Íbè merurú ala .

We believe that Ibe defiled the land.

(b) *Anyị́ kwere ala Íbè mèrurú .

33(a) Ó kwurú na iwú nde bèkéè shírí ikhe .

He said that law of white people is strict.

He said that the whiteman's laws are strict.

(b) *Ó kwurú iwú nde bèkéè shírí ikhe .

34(a) Anyị́ wéré yā na nná yá bára uba .

Let us take it that his father is rich.

(b) *Anyị́ wéré nná yá bára uba .

The deviance of the starred sentences is due to the fact that their

matrix predicates:	igúta	to read from
	ikwè	" believe
	ikwú	" say
	iwè	" take

are not factive verbs. Not being factive, these verbs block the relativization of their Na complements. From this fact emerges the first syntactic characteristics of factive predicate complements:

- (i) ¹¹ Only factive predicates allow the relativization of their Na complements to form factive relative clauses; non-factive predicates block the application of this rule. Such factive relative clauses are the Igbo equivalent of the English expression 'the fact that'.

11 There are some verbs, such as ínū - to hear, which take object complements and allow the relativization of these complements, although they could not be described as factive in the sense defined here on page 280. Karttunen (1970) argues that "the simple factive/non-factive dichotomy is inadequate to cover all the facts, and that it is necessary to recognise a class of semi-factives." What seems to happen is that there is a class of patently factive verbs, and another class of obviously non-factive verbs, and in between these two classes, there are some verbs which tend to share the qualities of both classes.

In Igbo, or at least in the dialect being described here, the popular method of indicating that the proposition of a Nà complement is an accomplished fact is by the use of factive relative clauses transforms, especially with predicates such as those of 25 which take sentential subjects. Thus, one will hear sentences of the following type rather than their Nà complement counterparts:

35(a) Èzhí ụ̀mụ́ m̄ zàrà tọ̀rọ̀ m obi ụtọ́.

Compound my children swept gladdened me heart glad.

The fact that my children swept the compound pleased me.

(b) Áríryó ọ ryògha na abyá m̄ iwe.

Begging he is begging annoys me annoyance.

The fact that he is begging annoys me.

(c) Èzhi okwū o kwùru tūrū mádụ́ nílè n'anya.

Truth he spoke struck everybody in eye:

The fact that he told the truth surprised everybody.

The second characteristic of factives will emerge from an examination of the following predicates and their complements in 37:

- | | | | |
|-----|--------|------|----------------------|
| 36. | ímēwe | anya | to convince |
| | íkūzhi | | to teach |
| | ígōshi | | to show, demonstrate |
| | ízhī | | to reveal, show |
| | ifuta | | to mean |

37(a) Nà Ógù goro ágo ēmeweele ānyị anya nà ọ wúhīi

That Ogu denied has convinced us that he is not

ónyè na ā tūkwaśa óbì.

person that one places heart on.

That Ogu denied has convinced us that he is not a person to be trusted.

- 37(b) Na' ya' rūrū àlā' à ga akúzhiri unū na
 that he defiled land this will teach you that
 ò díghī hwe na ò mechèfuu .
 it does^{not}/exist thing which he cannot do:

The fact that he committed this abomination will teach you that
 there is nothing he cannot do.

- (c) Na' nwáànyí' à gaghakwa áhya dū gbuò egóshila
 That woman this is still going market reach now has shown
 na' ò gbāshiri ikhe.
 that she is strong:

That this woman still trades till now has shown that she is strong.

- (d) Na' ñá' kwūru ókwu dí otho ò fūtara na
 That they said word which is like this means that
 ñá' còrò mmezhi.
 they want reconciliation:

That they said such words means that they want reconciliation.

Each of the examples of (37) has a sentential subject and a sentential
 object, and for each of the subject¹² complements there is a corresponding
 factive relative clause of the type shown in 35. It has been observed
 (The Kiparsky's 1971) that all two-place predicates in English taking
 subject complements are factive, the same seems to be true of Igbo, as
 36 and 37 show. From these examples, we arrive at the second differen-
 tiating quality of factives:

- (ii) Only factive predicates may take a sentential subject followed
 by a sentential object.

12 We observed on page that whereas all subject NP complements which
 are factive are nominalisable to yield factive relative clauses, factive
 object complements are not always so nominalisable, and that some of them,
 if nominalised require a transformationally inserted preposition maka.
 The same constraint is at work here with those factive predicates which
 can take a sentential subject followed by another sentential object.

We have pointed out that EXTRAPOSITION is an optional rule for all factive complements in subject position, but this is not the case with all non-factive complements in the same structural position, hence the third test for the factive/non-factive dichotomy:

- (iii) whereas EXTRAPOSITION is an optional rule for all subject factive complements, it is obligatory for some non-factive ones.

The two verbs that easily come to mind are

$$\left\{ \begin{array}{l} \text{idi} \\ \text{inu} \end{array} \right. \begin{array}{l} (\text{kà}) \\ (\text{nà}) \end{array} \Bigg\}^{13} \text{ seem, be likely, resemble,}$$

in the following examples:

38(a) Ya' ka' Ngozi ga' alo' n'og'e di' (m). (Base)

39(a) Ya' na' Ogu' jhere ejhe' nu' (m). (Base)

If EXTRAPOSITION were optional with these two verbs, one would expect the alternative rule of ya' Deletion to produce grammatical sentences. But this is not the case, as the deviance of 38(b) and 39(b) shows:

38(b) *Ka Ngozi ga' alo' n'og'e di' m.

39(b) *Na' Ogu' jhere ejhe' nu' m.

But the application of EXTRAPOSITION to the Base structure 38(a) and 39(a) will produce the well-formed sentences 38(d) and 39(d) through 38(c) and 39(c):

38(c) Ya' di' m' ka' Ngozi ga' alo' n'og'e. (By oblig. EXTRAP)

38(d) O' di' m' ka' Ngozi ga' alo' n'og'e.

It seems to me that Ngozi will return in time.

39(c) Ya' nu' m' na' Ogu' jhere ejhe'. (By oblig. EXTRAP)

(d) O' nu' m' na' Ogu' jhere ejhe'. (By Ya to O Conversion)

It seems to me that Ogu did go.

13 The problem with these two verbs is that it is not clear whether they should be respectively cited along with ka and na as some sort of verb particle, or without them. The disquieting aspect of such a citation form is that it has no other parallel elsewhere in the language, moreover the concept of verb particle seems foreign to Igbo. For the mean time, we leave the question open.

These same verbs which are marked for obligatory EXTRAPOSITION block the rule of Pseudo Cleft, and they are among the few predicates in Igbo whose complements are subject to the optional rule of Subject-Raising in the language, (cf 5.3.0 for a fuller discussion of RAISING).

Fourthly, only Factive Na` complements (which seem to be generally in Subject position) allow the derivation of what we choose to describe as (Factive) Gerunds as opposed to Infinitival nominals which are non Factive. We take up the above distinction in the immediately following section

5.1.3. As evidence in support of this assertion, consider the following:

- 40(a) Na` ọ́ wòghakwa nwá yā iĩi dọ́ gbuò zĩĩri nà`
 that who is still denying child her food reach now show that
 ọ́bì tara yá akhụ.
 heart eat her kernel:

That she has continued to deny her child meals shows that she is very unfeeling.

- (b) Iĩi ọ́ wòghakwa nwá yā dọ́ gbuò zĩĩri nà`
 ọ́bì tara yá akhụ (by Relat₂)

The food which she has continued to deny her child shows that she is very unfeeling.

- (c) Iwò nwá yā iĩi dọ́ gbuò zĩĩri nà` ọ́bì tara
 Refusing his child food up till now shows that she is
 yá akhụ.
 very unfeeling.

- 41(a) Na` Uche cédurú nwíè yá afò irí mèwere m'
 That Uche waited for wife his years ten convinced me
 ánya nà ọ́ nwèrè ndidi.
 that he has patience.

That Uche waited ten years for his wife convinced me that he is patient.

41(b) Nwíe' ya' Uché' cēduru' afò' irí' mēwere' m' anya
 His wife that Uche waited for ten years convinced me
 na' ó' nwēre' ndidi.
 that he is patient.

(c) Ícēdu' nwíe' ya' afò' irí' mēwere' m' anya
 Waiting for his wife for ten years convinced me
 na' Uché' nwēre' ndidi.
 that Uche is patient.

Each of the above sentences is grammatical; 40(c) and 41(c) derive from 40(b) and 41(b) respectively via a transformation rule (details of which are not clear) which derives Factive Gerunds from Factive Na' complements; the types of Na' complements involved being Subject NP complements. Observe that the relative clauses have been optionally deleted in either case. These forms (called I + verb stem forms) can only have factive interpretation if they derive from a factive Na' complements. Contrast, for example, the foregoing 40(c) and 41(c) with the following 42(a).

42(a) Inyē' ndi okhe mādhù' nsopurú' dī' mkpà.

{ To give respect to the elders is important.
 Respecting }

42(a) lacks a factive interpretation; it merely expresses an obligation, and is transformationally related to 42(b).

42(b) Na' anyi' ga enyé' nde okhe mādhù' nsopuru' dī' mkpà.

That we should give elders respect is important.

Although 42(b) is an example of Na' complement, it differs from the previous examples in the following way

- (i) the predicate involved is not a factive one and this is further borne out by
- (ii) the use of the modal ga for expressing obligation.

Concluding summary:

In this short section, we have brought syntactic evidence to show that the Factive-Non Factive distinction is valid for the Igbo Language on the following syntactic grounds:

- (a) Factive predicates generally permit the optional relativization of their Na' complements to form Factive relative clauses, and it is these Factive relatives which correspond to the English expression - the fact that - ; Non-factive complements block this optional rule.
- (b) Only factive predicates may have a sentential subject and a sentential object; when this happens, the Ya' deletion rule, if applied early in the derivation, does not necessary result in a derivational cul de sac since it is possible, with Factive Na' complements, to derive Factive Relative Clauses even after the deletion of Ya'. With non-factive complements on the other hand, an early deletion of ya' makes the derivation of other semantically related sentences difficult, if not impossible.
- (c) Although the rule of Extraposition from NP is optional for all Factive Complements, it is obligatory for at least a handful of Non-Factive predicates.
- (d) Only Factive complements can be reduced to (Factive) Gerunds by a rule (as yet unclear) of Gerund formation in Igbo. The distinction between Gerunds and Infinitives are made first on syntactic grounds, and then supported with the semantic interpretation of the homonyms involved.
- (e) Whereas a handful of non-factive predicates are subject to the rule of Subject-Raising (cf 5.3.0), no factive predicate is subject to the same rule.

Let us now consider the next category of complement-taking predicates, as the syntactic characteristics of members of this category provide additional support for our analysis.

5.1.3. Emotive Predicates

In 5.1.2, we argued that 42(a) is semantically and transformationally related to 42(b) and that such Na' complements are not introduced by factive predicates. However, the key factor in sentences such as 42 is not factivity since some emotive predicates are also factive (see page 289), but emotivity. Having argued for the Factive/Non-factive distinction in section 5.1.2., let us now examine the Emotive/Non-emotive dichotomy. In view of the fact that some emotive verbs are factive, the definition of emotive predicates given by the Kiparskies as "all predicates which express the subjective value of a proposition rather than knowledge about it or its truth value" ought to be modified for Igbo and English as follows "all predicates which express the subjective value of a proposition, which may or may not include knowledge about it or its truth value."

The case we shall present in this and the following sections is as follows:

- (i) Igbo is full of constructions such as 45-49.
- (ii) These sentences and others like them are associated with emotive predicates.
- (iii) The emotive predicates involved are all one-place predicates taking sentential subjects as argument. These sentential NP subjects are either the antecedent of a conditional construction (hence conditional clause) or θ -headed complex NP's, these two clause types lack any truth value.
- (iv) Factors (i)-(iii) are not random or due to chance, we therefore make the claim that emotivity and the lack of any claim about the truth value of such subject complements constitute both necessary and sufficient conditions for the derivation of Igbo infinitive complements which are the equivalent of English for-to complements.

In support of this hypothesis, we shall show that other non-factive verbs which are not also emotive do not take infinitive complements as subject.

Let us now consider the following list of verbs and the constructions in which they occur in 45-49.

43. ídi mma - be good
 " njo be good
 " mkpà " important, necessary
 ínyē aka be helpful
 iwū ehihi " ominous
 ítóshì (etoshi) " appropriate, worthy
 ikweshi (ekweshi)
44. ídi mfe - be easy
 íra ahụ " difficult
 iwū mmekpā-āhụ " trouble, problem
 ínyē nsògbú " the worry, trouble
 iwū ishiokwū " " crux of the matter, the problem.
- 45(a) Dimkpa ímēvo¹⁴ onwe ya n'òhà jógburu onwe yā.
 For a responsible man to disgrace himself in public is very bad.
- (b) Ítūru ĥa ashi dī m' mmā.
 To lie to them is acceptable to me.
- (c) Mádhù íhūwū ewi n'èhìhè wú ehihi.
 For a man to see the giant rat in broad day light is a bad omen.

14 There are two possible ways of analysing the underlined infinitival constructions: the first method, which is the easier of the two, is to see them as nominals which derive from the verb through the prefixation of the harmonising I. This analysis equates each of the Infinitives to such English nominals as dancing in 'Dancing is a form of entertainment'. We are not interested in this type of analysis; though it is possible, it can only explain half the truth. The second alternative is the one relevant here - this is the analysis which links these surface infinitives with some underlying conditional construction, an analysis which is examined and justified in the following 5.2.0.

45(d) Nwátàkírì ikwū cq̣q̣ cq̣q̣ jōrō njō .

For a child to talk very much is bad.

(e) Ítū takìshì kweshìrì ekwéshì.

To pay tax is appropriate

(f) Írì ířì n'og'è na enye' akā.

To eat food in time gives hand :

Eating regularly is good for the body.

From our analysis of the Igbo language, there can only be one type of sentential source from which 45(a-f) are derived: this is the antecedent of a conditional construction, especially the generalised conditional construction of the 46 type:

46(a) Ó jōgburu onwe yā mà dím̄kpa mév̄q̣ ōnwe ya

It is very bad if a responsible person should

n'òh̄a .

disgrace himself in public.

(b) Ó dì m̄ mmā mà á tuorō h̄i ashì .

It would please me if one told them a lie.

(c) Ó wū ehihi mà mádh̄u h̄w̄ ewi n'èh̄ih̄è .

It is a bad omen for a person to see a giant rat in broad day-light.

(d) Ó jōrō njō mà nwátàkírì na èkwú cq̣q̣ cq̣q̣ .

It is bad for a child to talk very much .

(e) Ó kweshìrì ekwéshì mà á na àtú takìshì

It is appropriate for one to pay tax.

(f) Ó na enye' akā mà á na èrì h̄wē n'og'è .

It does help one's health for one to eat regularly.

The claim we are making here and which we shall substantiate in the following section 5.2.0 is that 45 and 46 are transformationally related and derive from a base structure of the following type in which the predicate of the consequent is emotive, thus:

- 46(g) COND. Ya' wuru ma S Ya Predicate
[+ emotive]

The second type of subject infinitival complements with emotive predicates is illustrated by 47(a)-(e)

- 47(a) Írūcha oŕu ò ga ará anyi ahụ .

To finish this piece of work will be difficult for us.

- (b) Imēchilahu uzò ò wúkwani ishi okwū

To close afterwards this door is really head of matter.

Re-closing this door is the real problem.

- (c) Íg'idhe ya' wū mmekpā āhụ unū .

Catching it is your headache.

- (d) Ícōta uzò ébe kè hí adiñi mfe .

Tracing the way to their home is not easy.

- (e) Íphōchi alá kē è nyere nsògbú .

Refilling hole this gives trouble.

Refilling this hole is a problem.

What are the most likely paraphrases to 47(a-e)? It would be far-fetched to relate any of the above to conditional constructions of any type, since there is a wide gulf-syntactic and semantic-between these on the one hand and conditional constructions on the other. The proposition expressed in them is not conditional, but one that is associated with clauses beginning with 'how' or ótho (manner) in Igbo. We therefore propose the following paraphrases for 47(a-e):

- 48(a) Ótho anyi ga' ejí rụchaa oŕu ò ga ará anyi ahụ.

Manner we shall employ finish work this will be for us difficult:

How we shall complete this piece of work is the difficulty.

- (b) Ótho anyi ga' ejí mechilahu uzò ò wúkwani ishi okwū:

How we shall reclose this door is really the problem.

non-factive and non-indicative complements. By non-indicative complements we mean such conditional clauses (the antecedent clauses) and otho-headed (Manner) NPs as we have seen in the foregoing examples; other non-indicative complements also include such complement types as we have described in chapter 4 (4.1.1-4.1.5): The Interrogative ma_2 Complements, the Imperative si' complements and the Subjunctive ka/ma complements. As we have pointed out earlier on, none of these complement types makes any explicit claim about the truth or otherwise of its proposition. Only Na complements make such a claim, and this explains why infinitives are never associated with Na complements in Igbo, except in the very few cases like 50(a)-(b) where the emotive predicate idi $mkpa$ 'be necessary' is involved and where the indicative mood has been cancelled by the use of the modal auxiliary ga - 'should, must, ought.'

50(a) Na' $anyi$ ga $enye$ ndi $okhe$ $mādhū$ $nsopūrū$
 That we should give the elder people respect
 di $mkpa$.

is necessary: That we should respect the elders is necessary.

(b) $Inye$ ndi $okhe$ $mādhū$ $nsopūrū$ di $mkpa$.

Respecting the elderly is necessary.

In view of the fact that chapter 6 (364-376) of this thesis is devoted to the Igbo equivalents of embedded English WH-Questions of which otho-headed Manner NP's are a subset, we defer further discussion of it till that chapter, while we take up conditional (the antecedent) clauses in emotive predicate complementation in the following section 5.2.0.

Briefly, what we have argued here is that infinitival complements are associated with emotive verbs and that their underlying sources are either of the following:

- (a) the antecedent of generalised conditional constructions, or
- (b) Otho-headed Manner NP's. Infinitive complements, including those

with $k\grave{a}/m\grave{a}_1$ Subjunctive complements (cf chapter 8), must be distinguished from factive nominals or gerunds such as are associated with factive relative clauses (cf p.288-9). Although both infinitives and nominals have the same phonetic shape, their different origins and semantic interpretations justify the distinction we are making here.

5.2.0 Emotive Predicates with Conditional Clause Subject NP complements

At the moment, there is no detailed account of conditional construction in Igbo, except a more or less passing reference to them in Green and Igwe (1963 p.78ff). This being the case, it is necessary here to give a brief analysis of this construction type in view of the fact that subsequent reference will be made to it in the rest of this section.

The Green and Igwe account of Conditional expressions in Igbo cites sentences of the following type:

51(a) $Y\acute{a}$ byala, $\left\{ \begin{array}{l} kpo \\ gi \ \bar{a}kpo \end{array} \right\} \bar{m}$.

If/when he has come, (you) call me: Call me when he has come.

(b) $\acute{O}g'e$ méchee ngwañgwa, anyì agáwa faa .

If $\acute{O}g'e$ finishes quickly, we set out early.

(c) $\acute{O}nye$ nwuo, è lié yā .

If person dies one buries him: Anyone who dies will be buried.

Sentences of the above type represent but one subset of conditional constructions in Igbo - what we describe as the Open Condition with a dependency relation between the conditional clause (the antecedent) and the main clause (the consequent). However, any analysis of conditional constructions in Igbo which is limited to the above data tells but half the story, since there are two distinct types of conditional expressions in the language, viz:

- (a) the Open Condition, and
- (b) the Unfulfilled Condition.

In order to appreciate the form of 51 sentences and their relationship

with 52 it is necessary to give the full forms thus:

52(a) { \acute{A} $\text{si}\bar{i}$ na } yá bya , agà m aḥwú yā .
 (b) { Yá wuru mà }

{ If one says
 If it be } that he comes, I shall see him:

If he comes, I shall see him.

52(a) and (b) are exactly synonymous inspite of the formal difference between them: 52(a) is introduced by the matrix sentence \acute{A} $\text{si}(\bar{i})$, while (b) is introduced by Yáwuru . But this formal difference has no corresponding semantic difference, the two matrix sentences being frozen expressions which simply amount to the English conjunction 'if'. In both examples, the two verbs involved are complement-taking verbs -

$\acute{i}\bar{s}\bar{i}$ in the one case, and the copula
 $\acute{i}\bar{w}\bar{u}$ in the other.

It is, however, customary for the above 52(a) and (b) to be given in the form of 52(c) in which both the matrix sentence and the complementizer to the antecedent have been optionally deleted thus:

52(c) Yá bya , agà m aḥwú yā .

If he comes, I shall see him.

With the Open Conditional Construction, the deletion of the matrix sentence is always optional whatever tense of the verbs of the antecedent and consequent clauses. But the deletion of the complementizer mà , though optional, is determined by the tense of the verbs of the entire construction: the optional deletion of comp. in type 1 (open) conditional construction is subject to the constraint that the tense of both the antecedent and consequent clause verbs be simple present/future. 52(c) above with both the matrix sentence and the complementizer deleted is grammatical because the verbs of the construction satisfy the above tense constraint.

From the examples of conditional constructions given by Green and Igwe (1963, p. 78-83) and by Swift et.al (1962 p. 274-280), it has been

wrongly inferred that the conjunction mà is an optional element whenever the consequent is in sentence initial position in Igbo conditional constructions, but obligatory only if the consequent is preposed. What really happens is that the conjunction mà is generally deleted (more often than not) whenever the above tense constraints are met. The same conjunction cannot be deleted if the tense of the verbs in both the consequent and antecedent clauses is not the simple present or future.

Consider the following 53(a-k) as examples:

53(a) (Yá wụrụ) mà únu jhere ejhé, ọ māgburu onwe yā .

If it be that you went it be good kill self its

If you went, it was very commendable.

(b) (Yá wụrụ) mà o kwúole okwu ọjọọ, ụkà emébiéle .

If it be that he has spoken words bad matter has spoilt

If he has spoken in harsh term, the talk is ruined.

(c) (Yá wụrụ) mà únu agāñiì, únù ga mere onwá unù .

If it be that you went not you did selves your:

If you did not go, you have yourselves to blame.

(d) (Yá wụrụ) mà Ógù áñubèle ụlọ dú thaa,

If it be that Ogu has not built house reach today,

ò gāñiì iñu ọdọ.

he will not build another: If Ogu has not put up a building till now, he will not build any.

(e) (Yá wụrụ) mà eríghè ñi ñwé, lóghákwaá .

If it be that eating they thing, do come back.

If they are having their meal, do come back.

(f) (Yá wụrụ mà) gí mechee ngwañgwa, byakhwùtá m n'ọrụ.

If it be that you finish quickly come join me in farm:

If you finish quickly, come and join me in the farm.

(g) *(Ya' wuru ma) erighe ħi ħwe, loḡhákwaá .

(h) *(Unu jhere ejhe, o māgburu onwe yā.

(i) * O kwúole okwu ojoō, ukà emébiéle.

(j) Ma erighe ħi ħwe, loḡhákwaá .

If they are having their meal, do come back.

(k) Ma` unu jhere ejhe, o māgburu onwe yā.

If you went it was commendable.

Observe from 53(a-e) that the matrix sentence Ya' wuru is optional; secondly note that in (f) both the above matrix sentence and the following conjunction ma are optional because the tense of the relevant verbs is the simple present. By contrast, (g-i) which are respectively (f), (a) & (b) with the conjunction deleted are ill-formed. However the deviance is rectified in (j) & (k) (which are respectively (g) & (h) by the presence of the conjunction ma. From these data, it is obvious that the optional deletion of the deep-structure comp (what turns up in surface structure as a conjunction) is strictly governed by the tense of the relevant verbs.

There is, therefore, some syntactic motivation for establishing a transformational relationship between any pair of the examples 53(a-e) on the one hand and 53(j) & (k) on the other. While (j) & (k) can be accounted for in terms of the optional deletion of the antecedent-matrix sentence, forms such as (f), are related to the paradigm through the optional comp. Deletion rule which must be sensitive to the tense of the verbs in the conditional construction. Moreover, the paraphrase relationship between these examples is thus captured elegantly.

Observe also that only the Ya' wuru matrix S has been consistently used throughout 53 for the simple reason that the other form, A si(i) does not co-occur with the open conditional constructions once any other than the simple present or future tense is involved.

But with Type 2 - the Improbable and Unfulfilled Conditional construction, the picture is different. To begin with, the only permissible matrix sentence is $\bar{A} \text{ si}(\bar{i})$, and it is never deletable. Secondly, the verb of the consequent in this type 2 conditional construction is restricted to an unvarying form which corresponds to the English modal construction "... would (not) have been ...". There is also another formal difference - the presence of the function word $\left\{ \begin{matrix} \bar{m}ma \\ \bar{a}ma \end{matrix} \right\}$ which is a kind of clause marker to the consequent. Consequently, there is very little, if any, formal link between the two types of conditional constructions, and no effort is being made here to derive both types from one underlying source. We give some examples of Type 2 below only to complete the picture because it is type 1 conditional construction that is relevant to emotive predicate complementation.

54(a) $\bar{A} \text{ si } na' \text{ Ogu' } nwuru' \text{ anwu, } nwie' \text{ ya' } gaara \text{ ama'}$.

If one were to say that Ogu died, wife his would know:

If Ogu $\left\{ \begin{matrix} \text{died} \\ \text{had died} \end{matrix} \right\}$ his wife $\left\{ \begin{matrix} \text{would know} \\ \text{" have known"} \end{matrix} \right\}$

(b) $\bar{A} \text{ si } na' \text{ ofe } agbaala \text{ ũka, } i \text{ gaara } anu' \text{ ishi' } ya'$

If soup has gone sour, you would hear smell of it:

If the soup had gone sour, you would have smelt it.

(c) $\bar{A} \text{ si } na' \text{ miri' } edoole, \left\{ \begin{matrix} \bar{a}ma^{15} \\ \bar{m}ma \end{matrix} \right\} \text{ ala } eruru'ole$

(d) _____, ala gaara $\left\{ \begin{matrix} nruru' \\ eruru' \end{matrix} \right\}$

15 The meaning of $\left\{ \begin{matrix} \bar{a}ma \\ \bar{m}ma \end{matrix} \right\}$ is not clear; it seems tied up with the entire consequent clause meaning in this category of conditional construction. The function of the morpheme in the above examples is related to its use in the following expression in which an antecedent clause meaning is generally understood, thus:

..... $\bar{m}ma$ gi' $\bar{a}ghukpoo$ ya' anya.

you would have blinded him: You nearly blinded him. The

full form of the above example could be something like

$\bar{A} \text{ si } na' i \text{ kpachahii' } anya, \bar{m}ma \text{ gi' } \bar{a}ghukpoo \text{ ya' } anya$.

If you had not been careful, you would have blinded him.

The antecedent clause is generally omitted, being understood from the context. Note that English Pluperfect is achieved by a juxtaposition of Igbo Perfect and a clause introduced by $\bar{m}ma/\bar{a}ma$.

If rain has fallen, soil would have softened:

If it had rained, the soil would have become soft.

54(e) Á sí nà ánwù āchaala,

{ o gaara { mgbako
 agbakọ }
 yá āgbakọola
{ mmā }
 amā }

If sun has shone it would have dried:

If it had shone, it would have dried.

(f) Á si na' mmebye' ádií, mmezhi agāhīiri idīni.

If offence were not reconciliation would not be:

If there were no misunderstanding, there would be no need for reconciliation.

(g) *Ánwu āchaala, $\left\{ \begin{array}{l} o \text{ gàara } \acute{m}gbak\grave{o} . \\ \acute{m}ma \text{ ya' } \grave{a}gbak\grave{o}ola . \end{array} \right\}$

(h) *Ófe āgbaala ūka, I gàara anú ishĩ ya'.

From the deviance of 54(g) & (h) in which the matrix sentence of (e) and (b) respectively has been deleted, it is obvious that in type 2 conditional construction, the matrix sentence to the antecedent is obligatory. The verb of the consequent clause is restricted to the form given in 54.

Having given a complete picture of Igbo conditional constructions, we leave conditional Type 2 alone and concentrate on the Open Conditional Type 1 which is immediately relevant to emotive predicate complementation. But before we do this, we shall give what we consider the deep structures underlying both types.

Observe, too, that throughout these examples, we have assumed as primitive the order of the clauses given as the antecedent (conditional clause) followed by the consequent (main clause). The assumption is arbitrary, and no crucial argument is based on it; it just happens to tally with the order of constituents in Predicate calculus.

We suggest the following deep structure (Fig. 5) for the antecedent of the Open Conditional Construction (Type 1) which is introduced by Ya'wuru, the deep structure underlying the entire conditional construction, with an emotive verb as the matrix predicate, is shown in Fig. 7.

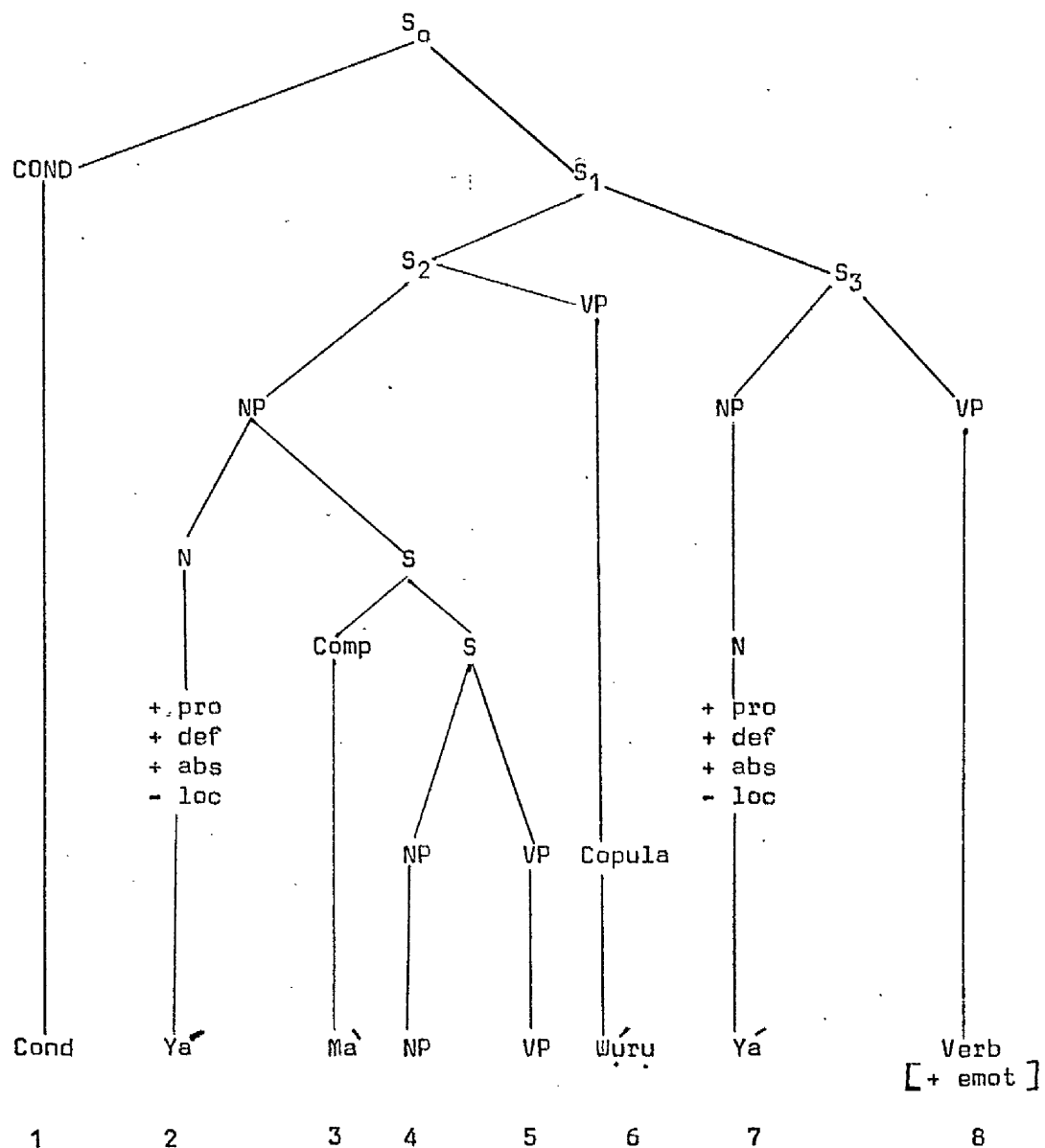


Fig. 5

The above represents the deep structure of conditional constructions beginning with Ya' wuru. To structures such as these, an obligatory rule - the Copula Movement rule - applies to produce 55 (a).

The Copula Movement Rule (obligatory)

SD	:	Cond	-	Ya	-	Comp	S	-	Copula	-	Ya	-	Verb
						[ma']			[wɔ']				[+ emot]
		1		2		3			4		5		6

Process : Attach 4 as the right sister of 2.

SC : 1 2 + 4 3 Ø 5 6

The output of this obligatory rule is 55 (a)

55 (a) Ya' wuru ma' S, S
If it be that S, then S.

The second type of conditional construction introduced by the antecedent matrix sentence, A' si na' is an instance of Object-NP complement, and has the deep structure shown in the following Fig 6.

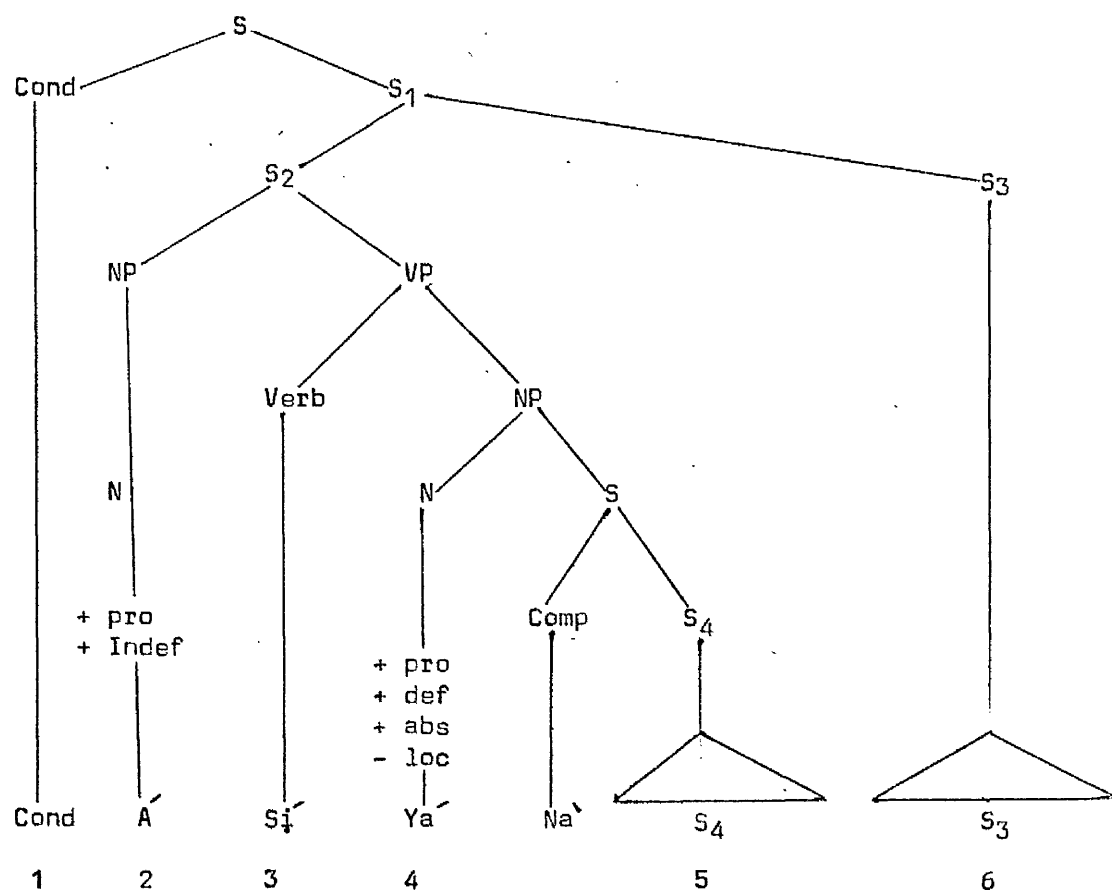


Fig. 6

The above structure must undergo the Ya Deletion rule thus:

SC : 1 2 3 Ø 5 6

The output is 55 (b)

55 (b) A si na S, S.

 If one says that S, then S.

The presence of the node Cond(ition) serves as a trigger for these obligatory transformations.

The two transformations may seem ad hoc, and such a charge is inevitable in the absence of any previous transformational account of Igbo complementation in relation to Conditional constructions. However, it seems that if Conditional constructions are to be captured within the framework of NP complementation in the language, and this seems valid from the syntactic evidence at our disposal, then certain transformations must be made sensitive to the presence of the node Cond. in deep structure. Such T-rules are the obligatory Copula Movement and Ya Deletion rules.

From now onwards, we assume that a case has been made for the analysis of conditional clauses as an instance of NP complements.

In 5.1.3 (p.293ff), we pointed out that the Subject NP complements of emotive verbs may be conditional clauses. What we are going to argue in the following section is that the antecedent of Conditional Construction Type I functions as subject NP to emotive verbs. In other words, we mean to show that 56 (a) and (b) are transformationally related.

56 (a) Ya' wuru ma' dímka mévoo ònwe ya

 If it be that a responsible person disgrace self his
n' òhà, 0' jògburu onwe yā.

 in public it is bad kill self it; If a responsible
person disgraces himself in public, it is very bad.

56(b) Dím̃kpa ímēvō onwe yā n' òh̃a
 For a responsible person to disgrace himself in public
 jógburu onwe yā .
 is very bad.

It could be argued that the relation between 56 (a) & (b) is better left to semantic equivalence rules rather than captured transformationally. Before we counter this objection, let us first examine the transformational process involved since part of the justification for our analysis will emerge from such a process.

The deep structure of 56 is shown in Fig. 7 below - which represents the full underlying structure of Fig. 5 to which reference was made on page 303.

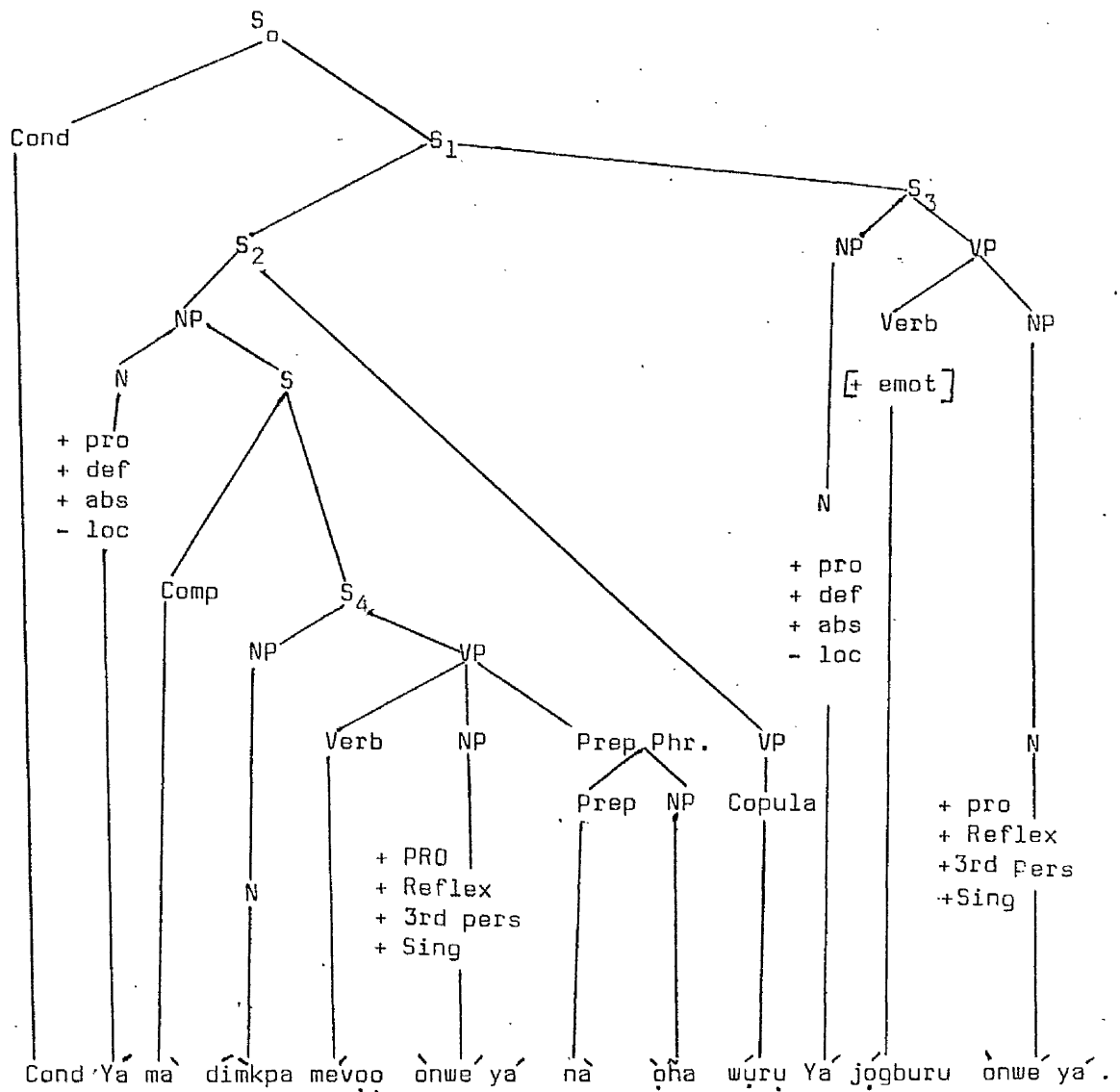


Fig. 7

To the underlying structure represented by Fig. 7, the obligatory Copula Movement rule given on page 304 applies to produce 56 (c) thus:

SD :	COND	-	N	-	Comp S	-	Copula	-	N	-	Verb
			$\begin{bmatrix} + \text{ pro} \\ + \text{ def} \\ + \text{ abs} \\ - \text{ loc} \\ \text{Ya'} \end{bmatrix}$				[wuru]		$\begin{bmatrix} + \text{ pro} \\ + \text{ def} \\ + \text{ abs} \\ - \text{ loc} \\ \text{Ya'} \end{bmatrix}$		[+ emot]
	1		2		3		4		5		6

Process: Attach 4 as the right sister of 2

SC : 1 2 + 4 3 Ø 5 6 56 (c)

56 (c) Cond. Ya' wuru ma' dimkpa mevo onwe ya n'oha,
Ya' jogburu onwe ya.

If the morphophonemic rule which converts Ya' to Ø and appropriate phonological rules were to apply to 56 (c), the output would be the well-formed sentence 56 (a) on page 305. Note that the node, Cond. is deleted only after the application of the above rules, since its presence ensures that the first Ya is not affected by the rule of Ya to Ø conversion. In other words, COND Ya' never becomes COND Ø by this rule as far as this dialect is concerned.

However, 56 (c) meets the structural description for the optional rule Antecedent Matrix S Deletion, thus:

The Antecedent Matrix S Deletion

SD:	COND	$\begin{bmatrix} \text{N} & \text{Copula} \\ \text{[Ya']} \end{bmatrix}$	$\begin{bmatrix} \text{comp NP} & \text{Verb}_1 \text{ (NP)} \end{bmatrix}$	$\begin{bmatrix} \text{N} & \text{Verb}_2 \\ \text{[Ya']} & \text{[+ emot]} \end{bmatrix}$
		s ₁	s ₂	s ₃
	1	2	3	4

Process : Delete 2

Condition : The tense of Verb₁ & Verb₂ must be future/
present.

SC : (1) \emptyset 3 4

The output of the above rule is 56 (d)

56 (d) (Ma') dím'kpa mév'oo ōnwe ya n'òh'a,
ya' jogburu ōnwe ya.

Observe that the node COND. may be deleted along with the antecedent matrix sentence or later after all relevant T-rules have applied.

Now 56 (d) in its present form is subject to either of two optional rules, namely:

(a) Infinitivization or

(b) The Consequent-Preposing rule.

If none of these two rules applies, then the application of phonological rules to 56 (d) yields the sentence 56 (e):

56 (e) (Ma') dím'kpa mév'oo ōnwe ya n'òh'a,
ò' jogburu onwe yā.

Since the complementizer ma' in 56 (e) is optional because it is sentence-initial, let us apply the Consequent Preposing rule, which makes ma' obligatory:

The Consequent Preposing Rule

SD:	COND	Comp	S ₁	S ₂
	1	2	3	4

SC: 1 + 4 2 3 \emptyset

The output is 56 (f) which becomes 56 (g) by the Ya to 0 conversion and relevant phonological rules:

56 (f) Ya' jogburu onwe ya ma' dím'kpa mév'oo onwe ya n'òh'a

56 (g) 0' jogburu onwe yā ma' dím'kpa mév'oo ōnwe ya n'òh'a.

56 (g) is well-formed.

Alternatively, we can apply the other optional rule of Infinitivization to the same 56 (e); there is no order relationship between these two rules.

Infinitivization (optional)

SD : Comp NP Verb (NP) (PP) Ya Verb (NP)

[+ emot]

1 2 3 (4) (5) 6 7 (8)

Process : (a) Prefix the Infinitive marker I¹⁶ to 3 and delete any time suffix on the verb.

(b) Delete 1 and 6

(c) Delete 2 obligatorily, if it is the Indefinite pronoun A, optionally otherwise.

Contition: The tense of the verbs 3 & 7 must be simple present/future.

SC : Ø 2 I+3(4)(5) Ø 7 (8)

The output of the above rule is 56 (h) in which the necessary phonological rules have also applied.

56 (h) Dimkpa ímēvọ onwe yā n' òhā

For a responsible person to disgrace himself in public

jógburu onwe yā.

is very bad.

Observe that Infinitivization here does not depend on a prior application of Equi-NP deletion, as is the case with subjunctive complements (cf 8.2.0). This explains the syntactic difference between the two types of Infinitives in this as in the English language, namely:

- (a) Subjectless Infinitives deriving from Subjunctive
Complements via Equi-NP deletion, and

16 The Infinitive prefix is given in its phonological form I, and has two possible phonetic realisations based on vowel harmony; (cf 2.1.1. p.36). For a detailed account of Vowel Harmony in Igbo, see Carnochan 1960 p. 155-163.

- (b) Infinitives with Subject deriving from ma_2 emotive predicate complements.

The subject of the (b) type of Infinitive is obligatorily deleted only if it is the indefinite pronoun A^{17} . As examples of those sentences where the Indefinite pronoun A must be deleted, consider the following 57 (a-d).

- 57 (a) $Ya' wury ma' e' meruo ya' ahụ, 0' ga' enye' nsogbu'$
 If it be that one wounds him it will give trouble:
 If he is injured, it will complicate matters.
- (b) $Ma' e' meruo ya' ahụ, 0' ga' enye' nsogbu'$ (By opt. Antecedent
 Matrix S del.)
- (c) $0' ga' enye' nsogbu' ma' e' meruo ya' ahụ.$ (By Consequent
 It will complicate matters if he is injured. Preposing)
- (d) $Imery ya ahụ ga' enye' nsogbu'.$ (By Infinitivization)
 To injure him will complicate matters.

The deletion of this third person indefinite pronoun a/e is obligatory in the process of infinitivization, whereas that of other indefinite or unspecified nominals is optional thus:

- (e) $(Madhu) ihwu ewi n'ehihe wu ehihi.$
 (For a person) to see the giant rat in broad daylight is a bad omen.

It is necessary to point out that the rule of Antecedent Matrix Sentence - deletion is ordered before both the Consequent Preposing and Infinitivization rules, if deviant sentences such as 57 (f) are to be blocked.

17 Like the Infinitive prefix, the phonological A for the Indefinite pronoun singular is harmonising, and has two phonetic realisations as in:
 $E' kwuru okwu$: One talked/someone talked
 $A' lury ogu$: One fought/some people fought.
 See 2.1.1 for more details.

57 (f) *Yá wúru mà dímkpa ímévò onwe yā n' òhà jógburu
onwe yā.

Observe that Infinitivization with emotive predicate complements does not depend on a prior application of Equi-NP deletion, but crucially on

- (a) The emotivity of the predicate and
- (b) The tense of both antecedent and consequent clauses.

We shall take up the issue of tense constraints in chapter 8 (8.2.0 p. 317-323) where we discuss the applicability of Equi-NP deletion in subjunctive (Ka/mā₁) complementation.

Although the rule of Infinitivization applies, in these examples, after Consequent Preposing, ordering is not necessary, as we have observed earlier (cf 5.1.0 p. 269). As a further illustration of this fact, let us examine the following sequence of derivations in which the subject NP of the antecedent clause is an unspecified agent nominal. The application of relevant phonological rules is taken for granted.

58 $\left[\begin{array}{c} \text{COND} \text{ Yá mà mádhù h́wú ewí n'èhíhè wúru} \\ s_1 \end{array} \right] \left[\begin{array}{c} \text{ya wú ehihi} \\ s_2 \end{array} \right] \text{Base}$

(a) Yá wúru mà mádhù h́wú ewí n'èhíhè, yá wú ehihi.

(By oblig. T-Copula Mvt.)

(b) Yá wúru mà mádhù h́wú ewí n'èhíhè, 0 wú ehihi

(By oblig Ya to 0 conversion)

If a person should see the giant rat in broad daylight, it is a bad omen.

58 (b) is well-formed.

(c) Ma' mādhu' h̃wū ewī n'ēh̃h̃e, Ǿ wū ehihi.

(By opt. Antecedent Matrix S deletion)

(d) Ǿ wū ehihi mādhu' h̃wū ewī n'ēh̃h̃e.

(By opt. Consequent Preposing)

It is a bad omen if a person should see the giant rat in broad daylight.

Both 58 (c) & (d) are well-formed.

(e) H̃wē' wū ehihi wū mādhu' h̃wū ewī n'ēh̃h̃e.

(By opt. Pseudo-Cleft followed by obligRelat₁)

What is a bad omen is for a person to see the giant rat in broad daylight.

(f) H̃wē' wū ehihi wū (mādhu') ĩh̃wū ewī n'ēh̃h̃e.

(By opt. Infinitivization)

(g) (mādhu') ĩh̃wū ewī n'ēh̃h̃e wū h̃wē wū ehihi.

(By opt Reverse Cleft)

(h) (mādhu') ĩh̃wū ewī n'ēh̃h̃e wū h̃wē wū ehihi.

(By opt. De-cleft)

To see the giant rat in broad daylight is a bad omen.

Each of 58 (c)-(h) is well-formed, and their generation follows a different sequence of rule application thus confirming that rules are simply intrinsically ordered. Observe also that the unspecified nominal, mādhu' is optionally deletable, as 58 (f-h) show.

If the unspecified agent nominal madhu is optional in sentences such as 58 (f-h), the indefinite Pronoun, A, is obligatorily deleted in 59 (f-h):

- 59 (a) $\left[\begin{array}{c} \left[\begin{array}{c} \text{Ya' } \text{mà } \text{á } \text{cọọ } \text{ya } \text{acọọ } \text{n'ọnu } \text{ùsékhwū } \text{kè } \text{è } \text{wúru,} \end{array} \right] \\ \text{So } \text{S}_1 \end{array} \right]$
- $\left[\begin{array}{c} \left[\begin{array}{c} \text{Ya' } \text{gà } \text{enyé } \text{nsògbú} \end{array} \right] \\ \text{S}_2 \end{array} \right] \text{ (Base) } \text{So}$
- (b) $\text{Ya' } \text{wúru } \text{mà } \text{á } \text{cọọ } \text{ya } \text{acọọ } \text{n'ọnu } \text{ūsekhwū } \text{kē } \text{è,}$
 $\text{Ó } \text{gà } \text{enyé } \text{nsògbú. (By oblig. T-Copula Move \& Ya' to Ó Conv)}$
- (c) $\text{Mà } \text{á } \text{cọọ } \text{yā } \text{acọọ } \text{n'ọnu } \text{ūsekhwū } \text{kē } \text{è, } \text{Ó } \text{gà } \text{enyé}$
 $\text{nsògbú. (By opt. Ante. Matrix S del.)}$
- (d) $\text{Ó } \text{gà } \text{enyé } \text{nsògbú } \text{mà } \text{á } \text{cọọ } \text{yā } \text{acọọ } \text{n'ọnu } \text{ūsekhwū } \text{kē } \text{è.}$
 $\text{(By T- Conseq. Prepose-opt.)}$

It would create a lot of problems if he should be missing from this family.

- (e) Hwě' gā enye nsògbú wū mà á còò yā acòò n'òny.
 ūsekhwū kē è. (By opt. Pseudo-Cleft & oblig. Relat₁)
 What will create a lot of problem is for him to be found missing
 from this family.
- (f) Hwě' gā enye nsògbú wū ịcò ya acò n'òny ūsekhwū kē è.
 (By opt. Infinitivization & oblig. Indef. Pronoun del.)
- (g) Ịcò ya acò n'òny ūsekhwū kē è wú hwe gā enye nsògbú.
 (By T-Reverse Cleft)
- (h) Ịcò ya acò n'òny ūsekhwū kē è ga enyé nsògbú.
 To find him missing from this family will create a lot of
 problems. (By opt. De-Clefting)

Each of 59 (b-h) is well-formed, and the deletion of the indefinite pronoun, A, is obligatory, as otherwise we would derive the ill-formed 59(i) which is 59 (f) with the indefinite pronoun undeleted.

- 59 (i) *Hwé' gā enye nsogbú wu A ico ya aco n'onu usekhwú
kē e.

Having shown how open conditional constructions with emotive verbs in the consequent (main) clause can be transformationally related to their infinitival counterparts, let us now try to answer the question raised on page 306 as to why we should relate infinitives and conditionals transformationally, especially as only a small sub-category of conditional constructions is involved in the examples under examination: If the T-rule which relates sentences such as 58 (b) & (f) or 61 (a) & (b) does not apply to all open conditional constructions, then the gain of such a transformational relationship is minimal, and the paraphrase relationship existing between such pairs as 61 (a) & (b) is better left to semantic equivalence rules.

In order to counter the above argument, it is necessary to point out that the verbs involved in the consequent clause of the conditional constructions and their infinitival transforms are complement-taking predicates belonging to the sub-category of emotive verbs, a semantic class which has been justified on syntactic grounds (cf 5.1.3.) Secondly, it will be observed from Figs. 5 & 7 and other relevant examples that the co-referentiality of the abstract proform Ya' in the antecedent and its morphophoneme 0' in the consequent is a unique characteristic of this type of conditional construction, and is possible only with emotive verbs which take sentential subject. As in other subject-NP complements, Ya' is deletable along with the antecedent - matrix sentence, but only obligatorily converted to 0', if it is the subject of the consequent (cf examples 57 (b), 58 (c) & 59 (c)). Thirdly, there is the very important consideration of the tense constraint on the applicability of the rule of Infinitivization: Very similar, if not the same tense constraint on the applicability of Equi-NP deletion and Infinitivization on the complements of forward-looking predicates (cf 8.2.0) are at work here in the infinitivization of the verb of the antecedent clause which,

....we have argued, is a subject NP to the emotive verb in the consequent. Just as the verb of a *ka/mà* subjunctive complement is always future in relation to the tense of the matrix sentence, so is the verb of the antecedent always future in relation to that of the consequent, which is generally future or simply present. The only difference in the two situations is this: The matrix verbs to *Ka/mà* subjunctive complements are generally inherently forward-looking predicates such as

<i>icō</i>	to wish, desire
<i>ikwadhō</i>	" prepare, plan
<i>ikwē nkhwa</i>	" promise

while those involved in emotive predicate complementation here are not inherently forward-looking, but must be future in order for Infinitivization to apply. Consequently, the paraphrase and transformational relationship between the following 60(a) & (b) parallels the relation between 61(a) & (b), except in so far as 60(a) has a subjectless infinitive complement, while 61 (b) has an infinitive complement with subject¹⁸.

60 (a)	<i>Ogù</i>	<i>cōrō</i>	{ <i>ka</i> <i>ya'</i> <i>luwa</i> }	<i>ādha</i>	<i>gī</i>
(b)			{ <i>ilūwa</i> }		
61 (a)	<i>Dimkpa</i>	{ <i>kwūwe</i> <i>cōrō</i> <i>cōrō</i> , <i>ō</i> }	<i>wū</i>	<i>hwe</i>	<i>ihwerē</i> .
(b)	"	{ <i>ikwūwe</i> " " }			

If a responsible person starts talking too much, it is a shame.

For a " " to start talking too much is a shame.

18 See the rule of infinitivization (p. 310) where it is argued that only indefinite nominals (nouns or the pronoun A 'one') can be deleted. Infinitivization in emotive predicate complementation is not triggered by Equi-NP deletion as is the case with *Ka/mà* subjunctive complements.

It seems, therefore, that by capturing transformationally the paraphrase relationship between pairs of sentences such as 61 (a) & (b), we are merely invoking an independently motivated constraint, and this, coupled with the first two reasons given above, constitutes sufficient justification for not leaving this paraphrase relationship to semantic equivalence rules. The tense constraint on infinitivization explains why infinitives generally have a future meaning in most languages, Igbo and English, for example.

5.2.1 Emotive Predicates And Raising

Just as emotive predicates are the only sub-group of verbs which take infinitival complements, some of them are similarly the only verbs in Igbo which allow their complements to undergo the Raising Rules (Subject and Object Raising). Only non-factive emotives are involved. Subject - Raising accounts for the transformational relationship between 62 (a) & (b), while Object - Raising is responsible for the paraphrase relationship between 63 (a) & (b).

62 (a) It appears that John is a shy character.

(b) John appears to be a shy character.

63 (a) I wanted for John to be present at the conference.

(b) I wanted John to be present at the conference.

In 62(b), the subject of the that - complement has been raised into the subject position of the matrix sentence (hence Subject - Raising or Raising Subject NP into Subject position), while in 63 (b) the subject of the for - to complement has been raised into the Object position of the matrix clause (hence Raising from subject into object position). Raising is a fairly wide-spread phenomenon in English, and is one of the sources for deriving the prolific infinitival complements in the language.

But it seems a very restricted syntactic process in Igbo, and so far, only a handful of emotive predicates are known to be subject to the rule of Subject - Raising; Object - Raising does not seem to be a rule of Igbo syntax, and even in English, its status is questionable.

By subject - Raising in Igbo, we mean that the subject - or object - NP of a complement clause can be raised into the subject position of the main clause. Igbo, unlike English, does not raise subject into an object position. As 65 & 66 show, Raising from Object into Subject position in Igbo is very similar to Tough-Movement in English, as illustrated by the following English examples:

(a) It is tough for any champion to beat Arthur Ash.

(b) Arthur Ash is tough for any one to beat.

The verbs involved in the Subject - Raising rule in Igbo include:

$\begin{Bmatrix} \text{in}\bar{u} \\ \text{id}\bar{i} \end{Bmatrix}$		to appear, seem, be likely
$\text{it}\bar{o}sh\bar{i}$ (etoshi)		to be appropriate
$\text{ikw}\bar{e}sh\bar{i}$ (ekweshi)		worthy, good
$\text{id}\bar{i}$ mma		to be good, moral
" njọ	" "	bad, immoral
" mkpà	" "	necessary

Of these, the first four are those which are subject to obligatory Extraposition, as illustrated on page The following 64-66 illustrate Subject - Raising in Igbo:

64 (a) Ọ́ dī́ ka nwá a dhara adhá.

It seems that this child had a fall

(b) Nwá a dī́ ka Ọ́ dhara adhá.

Child this seems that he fell fall:

This child seems to have had a fall.

65 (a) \bar{O} $\left\{ \begin{smallmatrix} \text{tòshìrì} \\ \text{kwèshìrì} \end{smallmatrix} \right\}$ ka \acute{m} lụwa nwa - āgboghō ò

It is appropriate that I should marry this young girl

(b) Nwá - āgboghō ò $\left\{ \begin{smallmatrix} \text{tòshìrì} \\ \text{kwèshìrì} \end{smallmatrix} \right\}$ ka \acute{m} lụwa yā .

This young girl is fit that I should marry her:

This young girl is fit for me to marry.

66 (a) \bar{O} dī mkpà na anyị hụwuru Díkhē .

It is necessary that we should see Dikhe.

(b) Díkhē dī mkpà na anyị hụwuru yā .

Dikhe is necessary for that we should see him:

Dikhe is necessary for us to see.

These examples are enough to illustrate what happens in Subject Raising in emotive predicate complementation in Igbo: when the object of the complement is raised into the subject position of the main clause, its pronominal copy is left behind. This explains the presence of the object pronoun yā (her) in 65 (b) and yā (him) in 66 (b) where these two homonyms stand for 'Nwá - āgboghō ò' (this young girl) and Díkhe respectively. Unlike what happens in English, RAISING in Igbo does not give rise to infinitives, rather Infinitivization is independent of RAISING, as the above examples conclusively show. The rule of Subject Raising will apply whether or not the emotive predicate complement has undergone the rule of Infinitivization:

- (b) Only such emotive predicate complements are subject to the optional rules of Infinitivization and Subject Raising, these two rules are not mutually dependent, as is the case in English where RAISING gives rise to infinitives.
- (c) Infinitivization in these complements is a consequence of the emotivity of the predicates involved and the fact that the verbs in both the antecedent and consequent clauses express no more than the simple present/future time, a fact we relate to EQUI and forward-looking verbs in chapter 8.
- (d) RAISING in Igbo means the raising of either the subject or object of the complement clause into the subject position of the matrix or main clause. In the case of raising from object position, a pronominal copy of the complement object is always left behind, unless the complement in question has previously undergone the rule of Infinitivization.

We also distinguish the above infinitival complements from the gerunds which we associate with factive *Na'* complements; this distinction is justified on syntactic and semantic grounds.

5.3.0 *Na'* - Complement Verbs

The great majority of NP - complement - taking verbs in Igbo take *Na'* complements either as subject or object. Many of these may also take *Ka/ma'* subjunctive, or *ma'* Interrogative complements; they will also take *si'* Imperative complements if they are verbs of saying. In view of this fact, cross - classification of verbs is inevitable. Only a representative sample is given, and the list is by no means exhaustive. We give, first, *Na'* Subject - NP verbs, and then Object - NP ones.

List of Verbs

íbhà urú	- to be useful
ídi	- to be
ído anya	- to be clear (of facts, argument etc.)
ígá anya	- to pass through the eye
ígbagwọ́ju anya	- to be confusing, to confuse
íkpa ùhwa	- to please, delight
íkudhà obi	- to cool the mind, calm down
íkúju obi	- to pacify, calm down the mind
ikweshi	- to be worthy, appropriate
ímashi	- to please, delight
íme ihwere	- to shame, to cause to become ashamed
ímewe anya	- to convince, cause someone to be convinced
írà ahu	- to be difficult
itughà obi	- to cause to change one's mind
ítu n'anya	- to surprise, astonish, to cause to change
iwe anya	- to be evident, to be convincing
íce	- to think, conjecture
ícfút-a	- to discover, find out
íde	- to write
ígbà àgugo	- to argue, debate
ígbà akaebé	- to testify, give testimony
ígbà àma	- to disclose
ígbà izu	- to whisper
ígbàshà	- to spread, circulate
íghà ugha	- to lie, tell a lie
íghota	- to understand, comprehend
ígo	- to deny
ígoshi	- to demonstrate, show

igū	- to read
igwa	- to tell
ihwū	- to see
ijū	- to refuse
ika	- to say, relate etc.
ikō	- to guess
iko	- to narrate
ikota	- to recognise
ikowa	- to explain, elucidate
ikūzhi	- to teach, instruct
ikwafē	- to deceive, to banter
ikwe	- to agree, consent
ikwē nkwa	- to promise, make a promise
ikwū	- to say, relate etc.
ikwufuta	- to confess
ile anya	- to expect, await
ima	- to know, realise
ima ebe	- to wager
ima iwu	- to legislate
imata	- to know, realise
imuta	- to learn, understand
iro aro	- to dream
irutu aka	- to point out
isha	- to reply
isi	- to say, relate, allege etc
iti mkpu	- to shout
itu	- to plan
itu anya	- to expect, await
itugha	- to discuss
itu ujo	- to be afraid, fear
iwe	- to take as, to take that,

iza

- to answer

izhi

- to show

izhi ózhi

- to send a message, word

Chapter 6

ma_2 NP - (Embedded Yes/No Question) Complements

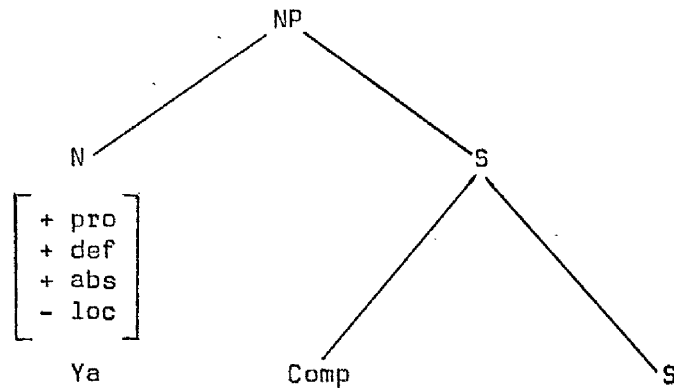
And

Embedded $kèdú$ - Questions

6.0 Introduction

This chapter is divided into two major sections, the first part (6.1 - 6.2) is concerned with Interrogative complementation, that is, the embedding of questions demanding the answer Yes or No (hereafter referred to as Yes/No Questions) as NP, while the second part (6.3.0 - 6.3.1) is devoted to the Igbo equivalents of embedded English WH- Questions. We have decided to describe the latter as $kèdú$ - Questions to avoid any wrong impression which might be created by talking of WH- Questions in the description of a language where the form WH- has no morphological basis. The decision to treat the two types of questions together is made on the need to facilitate comparison and contrast. Section 6.4 considers in detail the syntactic uniqueness of $ótho$ - headed NP in so far as they relate to other NP - complements in the language, while in 6.5. we give a sample list of verbs which take Interrogative complements.

In 6.1 - 6.2 we show that ma_2 clauses are instances of NP - complements while their $kèdú$ counterparts, though NP's, lack the structure characteristic of sentential complements such as we have given in this thesis. Rather, $kèdú$ - Questions, of which $ótho$ - headed NPs form a sub-part, have the structure of a complex nominal (Nom S) (cf 4.2, PS-rules 6 & 8, p. 206) while an NP - complement is characterised by the following internal structure :



where the nominal head must have the above feature specifications which the N of a complex Nominal structure does not have. In addition, sentential complements are characterised by complementizers in their structure, whereas complex Nominals (relative clauses, for example,) are not.

In view of the fact that there is no detailed analysis of Question constructions in Igbo to which reference can be made, we have considered it helpful to supply the necessary background in the following section 6.1.

6.1. Types of Igbo Questions : 1. Yes/No Questions.

1 (a) Ọ̀gụ̀, Ọ́ byara áhya?

Ogu, he came (to) market? Did Ogu come to market?

(b) Nđom̃ yá, ńhà nọchakwa yá?

Wives his they stay all at home ?
in it

Are all his wives at home?

-
- 1 Throughout these examples, we have deliberately departed from our convention of not marking the tones of successive syllables unless there is a contrast or change of pitch. For example, all the pronoun subjects have been marked as low or low - low regardless of whether the preceding syllable is also on the same pitch. We have done this in order to highlight the low tone pattern of pronouns in Question constructions in the language.

- 1 (c) Dimkpa, í na agbalíkwa?
 Man, you are trying also?
 Man, are you doing fine?
- (d) Unu anújuole māi afo?
 You have drunk fill wine stomach?
 Have you taken wine to your satisfaction?
- (e) Ogwe m, m hwurú yá anya?
 Self mine, I saw him eye? (Rhetorical)
 I did not even see him myself.
- (f) Anyi gbúru ochu? (Idiomatic)
 We killed ochu? Did we commit murder?

2. Kèdú Type:

- 2 (a) Ogu, 0 mere {giri
gini} ?
Ogu, he did what? What did Ogu do?
- (b) Ibe, 0 gidhere onye?
Ibe, he wrestled down who? Who did Ibe throw/beat?
- (c) Umu ndom, ha jhe n' olee?
The women, they are going where?
Where are the women going?
- (d) Enyi, i mene {olia
anaa}
Friend, you have done how?
Friend, how do you do? (A greeting)
- (e) Nenna, i loro {ole mgbu
mgbu ole}
Nenna you returned what time?
When did you return, Nenna?

2 (f) Unu jiri òlé mgbu byá?

You used what time come? When did you come?

It will be observed from examples 1 & 2 that question formation in Igbo demands that -

- (a) There be a pronominal copy of the subject of the sentence, unless such a subject happens to be a pronoun; this is in contrast to statements, which do not demand any such pronoun copy;
- (b) This pronominal copy must have a low (if monosyllabic) or low - low tone pattern, (if disyllabic).

Secondly, examples 1 (a-f) differ from 2 (a-f) in that the former lack what the latter have, the following question morphemes which are always present in this type of question:

- (i) $\left\{ \begin{array}{l} \text{gírí} \\ \text{gíní} \end{array} \right\}$ - what
- (ii) ònyé - who?
- (iii) (nà) òléè - where?
- (iv) $\left\{ \begin{array}{l} \text{òlía} \\ \text{ànáá} \end{array} \right\}$ - how?
- (v) $\left\{ \begin{array}{l} \text{òlé mgbu} \\ \text{mgbú òle} \end{array} \right\}$ - what time/when?

These question morphemes constitute the major difference between Yes/No and Kèdú- Questions in Igbo. Examples 1 (a-f) represent the Yes/No Questions, while those of 2 (a-f) are instances of the Kèdú types, which are the Igbo equivalents of WH- Questions in English. If the examples of 2 represent what we have described as Kèdú - Questions, how does the morpheme Kèdú come into our discussion?

In order to answer the above question, let us admit the following additional data:

3 (a) Giri mèrè ?

What happened?

(b) Kedú ñwe mērenī?

(c) Onyé byàrà ?

Who came?

(d) Kedú onye byāranī?

4 (a) { Kedú
Ndii
Olée } ñwe Ibe mèrè?

What thing Ibe did : What did Ibe do?

(b) Kedú onye Ogu g'idhere?

Which person Ogu defeated in wrestling:

Whom did Ogu defeat in wrestling?

(c) Olée ebe umù ndhom jhe?

Which place women are going:

Where are the women going?

(d) Nenna, ndii { mgbu
og'e } í lōrō?

Nenna, what time did you return?

(e) Enyi, kedú otho I mèrè? : Friend, how do you do?

(f) Kedú og'e { unū
unū } jiri byá?

What time you used come : What time did you come?

Observe from the foregoing examples that 3 (b) is the kedú or periphrastic version of 3 (a), just as 3(d) is that of 3 (c). In 4 (a) Kedú is given as one of a closed set of items which may introduce the appropriate variant of Type 2 or Kedú - Question. In other words, kedú is a cover term for these lexical items which always function in initial position in this form of Type 2 questions. We have chosen it as a descriptive label because of our liking for it as a shortened form of greeting which is fast gaining popularity.

Strictly speaking, kèdú is an Onitsha dialect word which is now used non-dialectally, while ndíí and òléé are Owerri in origin. When we talk of kèdú - Questions, we mean that category of questions (Question Type 2) which do not demand a Yes/No answer. They have two variants - the form without the item kèdú, such as are shown in 2 (a-f), and the form with kèdú (the periphrastic form of kèdú - Questions) as revealed by 3 (b) & (d), and 4 (a-f). As we shall show in 6.3.0, it is the periphrastic forms which are analysable as relative clauses whether or not they are embedded as complex NP's to complement - taking predicates. Any further details about this subcategory of Igbo questions are deferred to the above section.

Despite the superficial similarities of Yes/No and Kèdú - Questions, we do not propose to derive the two types of questions from one common underlying form, the main reasons being that ^{structurally} the Yes/No type requires the trigger Q, which Kèdú - Questions do not require since they have an interrogative morpheme in deep structure. Secondly, it is theoretically more sound to derive the non-periphrastic form of Kèdú - Questions from the periphrastic form via a reduction rule, rather than involve oneself in a structure - building process by attempting to generate the periphrastic version from the more basic, non-periphrastic form. Fig. 1 below represents the deep structure of Type 1 (Yes/No) Question in Igbo

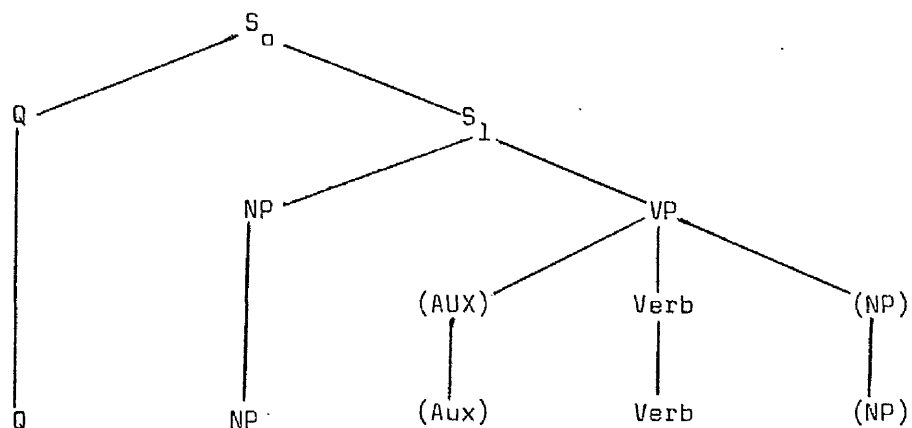


Fig. 1

To the above figure we apply the following obligatory T-rule for Yes/No Question formation in Igbo:

The Q - Substitute And Pronoun Copy Rule (Oblig.)

SD : Q - NP - (AUX) - Verb - (NP)
 1 2 3 4 5

Process : Substitute 2 for Q and leave a pronoun copy of 2 behind.

SC : $\begin{bmatrix} Q \\ 2 \end{bmatrix} \begin{bmatrix} 2 \\ \text{pro} \end{bmatrix} + (3) 4 (5)$

It is the application of this rule which produces sentences such as 5 (b) from 5 (a).

5 (a) Q Ndi ụlọ́ yá dīcha mma

(b) Ndi ụlọ́ yá, ãhà dīcha mmā?:

Members of house his, they are all well:

Are his family all well?

5 (b) is represented by the following tree-diagram, fig. 2

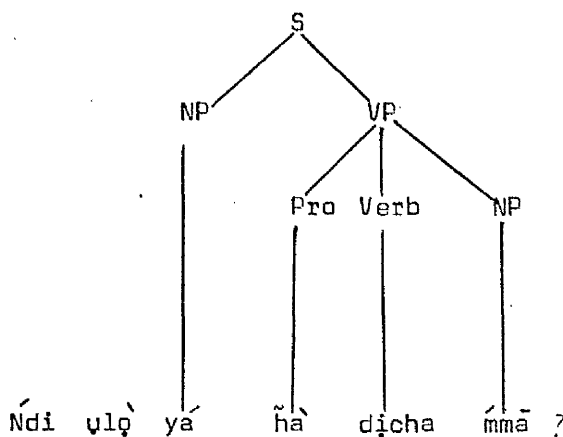


Fig. 2

Kèdú - Questions

Kèdú Questions (Type 2 Questions) have the following underlying structure:

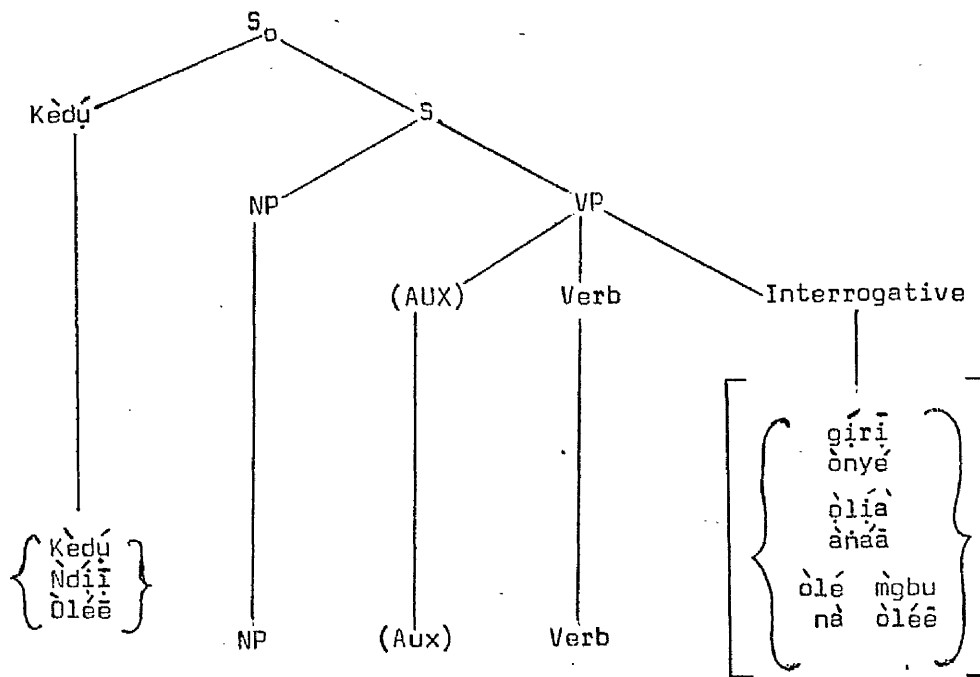


Fig. 3

It is observable from the above fig. 3 that Kèdú and its substitutes constitute a pre-sentence in the deep structure of Type 2 (Kèdú -) Questions, and that the VP is expanded into verb and interrogative, instead of verb and NP (aux being an optional element). The derivation of both the non-periphrastic and the periphrastic versions of kèdú - Questions follows the following rule application:

The Pronoun Copy and Kèdú Deletion Rule (Oblig.)

SD : Kèdú NP (AUX) Verb Interrogative

1 2 3 4 5

Process : Attach the pronominal copy of 2 as the left sister of 3, or of 4 if there is no 3

Delete 1

SC : \emptyset 2 $\left[\begin{array}{c} 2 \\ \text{pro} \end{array} \right]$ + (3) 4 5

Only this T-rule along with the relevant phonological rules is needed to derive sentences such as 6 (b) from 6 (a) thus:

- 2

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- (

T

t

37

A

Examples 3 (b) & (d) and 4 (a-f p.329) illustrate the use of these forms occurring in the periphrastic versions of Kèdú - Questions.

6 (e) has the following derived constituent structure, Fig. 4

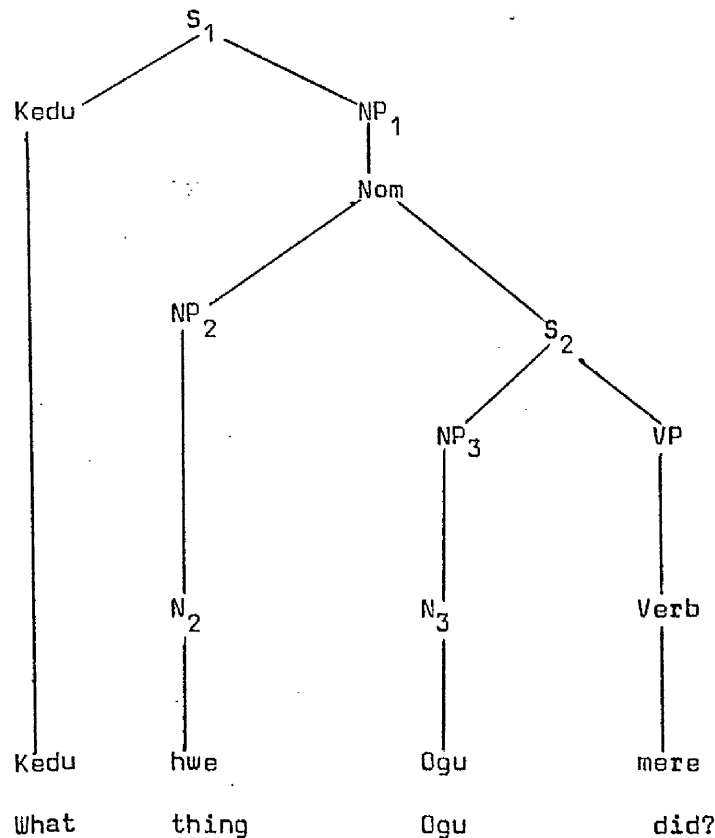


Fig. 4

What did Ogu do?

The details of the rules which produce sentences such as that shown in the above Fig. 4 belong appropriately to Section 6.3.0, and are deferred to that section.

Summary: In the foregoing section, we have demonstrated that there are two categories of Questions in Igbo - Yes/No and Kèdú - Questions and that each of them has a different underlying structure, as shown in Figs. 1 and 3 respectively.

In Kèdú - Questions, the periphrastic and non-periphrastic forms are related by a transformation which deletes kèdú in the non-periphrastic versions, but not in the periphrastic ones.

The non-deletion of *kèdú* triggers a movement rule which moves the interrogative to a position where it is immediately preceded by *kèdú*, thus giving rise to a set of morphophonemic rules whose output becomes the input to the Tone rules which are needed in relative clause formation.

So far, our discussion of Interrogative Sentence formation has been confined to Direct Questions. In what follows, we shall see how the process of embedding these questions affects the rules so far discussed. What we have described throughout this thesis as *Ma*₂ (Interrogative) complements are instances of Indirect Yes/No Questions embedded as NP after a subset of matrix verbs.

6. 2. *Ma*₂ NP Complements : Embedded Yes/No Questions

The following sentences contain instances of *ma*₂ Interrogative complements:

7 (a) *Ógù júrù ma*₂ *ànyì* ga *ejhákwe ahyā*.

Ogu asked {whether
if} we shall go still market.

Ogu asked whether we should still go to market.

(b) *Ma*₂ *ò* *turù ashí* *ma*₂ *ò* *kwuru ézhiokwū*

Whether he told lie whether he told truth

na *agbágwòjú m̄* *anya*.

is confusing me eye:

Whether he lied or told the truth is still confusing to me.

(c) *Ányì* na *agbá agùgò* *ma*₂ *ì* *h̄wụkwara yá* *n'anya*.

We are arguing whether you really love him :

We are debating the issue as to whether you really love him.

(d) *Ágàla* *cheghekwe* m *ma*₂ *ò* ga *ekwé* *ìbyānì*

Still thinking am I whether he will consent to come.

I am still wondering whether he will consent to come.

- 7 (e) Anyí anūbèle ma₂ Égō (Q) lūola dī.
 We have not heard if Ego she has married husband.
 We have not heard whether Eg'o has married.

The structure underlying the above sentences is given below in Fig. 5.

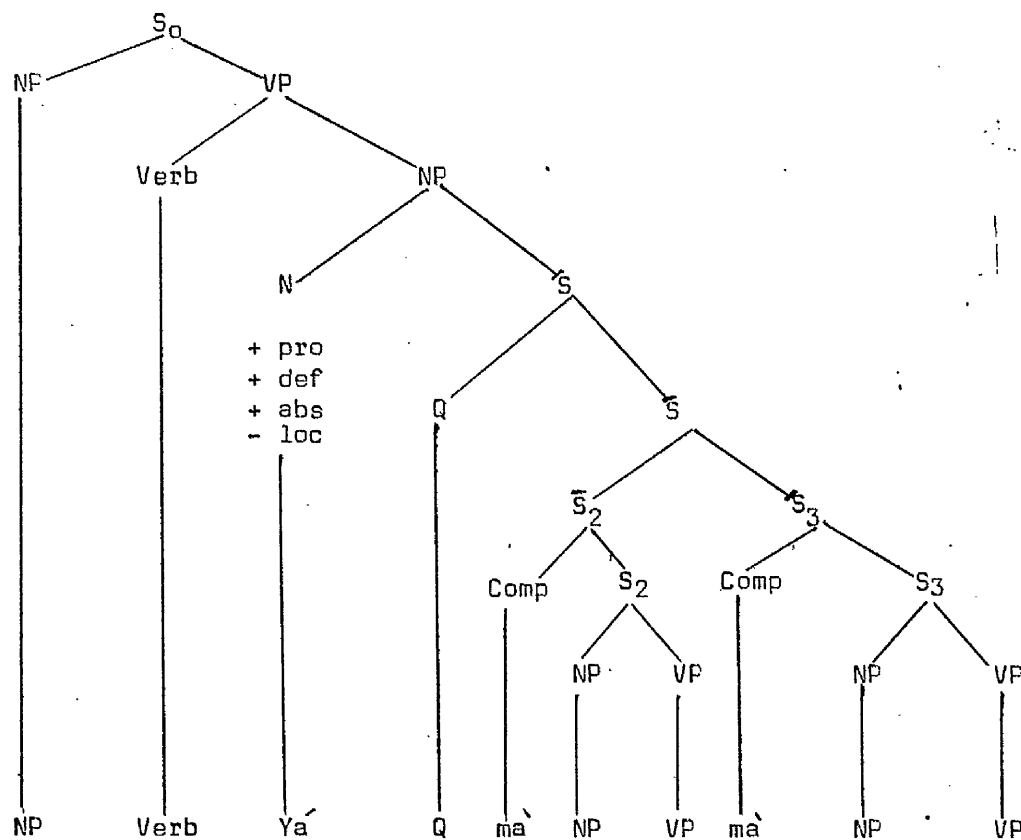


Fig. 5

The deep structure of ma₂ NP complements is not different from that of any other NP-complement except in terms of the node present and the necessity of having double questions embedded in such a structure. Observe that it is the pre-sentence Q which triggers the Q - substitute and Pronoun - Copy rule discussed in 6.1. page 330. This T-rule is still very relevant to ma₂ complementation in view of sentences such as 7 (e) repeated here with its variant:

- 7 (e) Anyí anūbèle ma Ég'ō { Q lūola / ālūola } dī.

What happens is that for some dialect speakers, the T-rule is obligatory for both embedded and non-embedded Yes/No Questions; for others, it is obligatory for all non-embedded Yes/No Questions, but optional for embedded ones. This is the situation in the dialect being described here. Whether this Q substitute and Pronoun Copy rule applies in Ma_2 complementation or not is immaterial to the transformational processes involved in this subset of Igbo complementation, although its application serves to maintain the essential unity between Yes/No questions on the one hand and Ma_2 NP complements on the other. The need to maintain this unity of treatment is the overriding reason for the application of this T- rule throughout this chapter.

In order to see the derivational processes involved in the generation of the sentences of 7, let us examine the following paradigms 8 and 9:

- 8 (a) $Ib\grave{e}$ $j\grave{u}r\grave{u}$ m $m\grave{a}_2$ $\acute{O}g\grave{u}$ \grave{O} $nw\grave{u}r\grave{u}$ $anw\grave{u}$ $n'ezhi$ $okw\bar{u}$.
 Ibe asked me whether Ogu he died in true word.
 Ibe asked me whether Ogu really died.

- (b) $H\tilde{w}\acute{e}$ $Ib\check{e}$ $j\bar{u}r\bar{u}$ m $w\bar{u}$ $m\grave{a}_2$ $\acute{O}g\grave{u}$ \grave{O} $nw\grave{u}r\grave{u}$ $anw\grave{u}$ $n'ezhi$ $okw\bar{u}$.
 What Ibe asked me is whether Ogu really died.

- (c) $m\grave{a}$ $\acute{O}g\grave{u}$ \grave{O} $nw\grave{u}r\grave{u}$ $anw\grave{u}$ $n'ezhi$ $okw\bar{u}$ $w\bar{u}$ $\tilde{h}w\acute{e}$ $Ib\check{e}$ $j\bar{u}r\bar{u}$ m.
 Whether Ogu really died is what Ibe asked me.

- 9 (a) $\acute{A}ny\grave{i}$ $gb\acute{a}gha$ $\acute{a}g\bar{u}g\bar{o}$ $m\grave{a}_2$ $\acute{u}m\bar{u}\acute{a}k\bar{a}$ \grave{a} $\tilde{h}\acute{a}$ $\tilde{h}w\bar{u}r\bar{u}$
 We are arguing whether children these they saw
 $\acute{n}di$ $\acute{o}\tilde{h}\bar{i}$.
 thieves : We are debating whether these children saw any
 thieves.

9 (b) mà ỳmỳákā à ẵhà ẵhữrự ndi oẵhĩ, anyị
 Whether these children saw any thieves, we
 gbāgha àgụgọ yá.
 are doubtful.

(c) Hwe' anyị gbāgha àgụgọ yá wụ mà ỳmỳákā à
 What we are arguing about is whether these children
 ẵhà ẵhữrự ndi oẵhĩ.
 saw any thieves.

(d) mà ỳmỳákā à ẵhà ẵhữrự ndi oẵhĩ wụ hwe
 Whether these children saw any thieves is what
 ányị gbāgha àgụgọ yá.
 we are arguing about.

The derivation of paradigm 8 is as follows:

10 (a) $\left[\begin{array}{c} \text{Íbè} \\ S_1 \end{array} \right] \text{ júrụ } m \left[\begin{array}{c} \text{ya} \\ S_2 \end{array} \right] \text{ Q mà Ógù nwúrụ anwụ n'ezhi-okwū } \left. \right]_{S_2}$
 (Base Form)

(b) Íbè júrụ m ya mà Ógù ò nwúrụ anwụ n'ezhi-okwū
 (By T-Q substitute & Pro Copy, opt.)

(c) Íbè júrụ m mà Ógù ò nwúrụ anwụ n'ezhiokwū.
 (By abstract Yá Deletion- opt)

10(c) above is the same as 8 (a). As was made abundantly clear in chapter 6 on Nà complementation, an early deletion of the abstract pronoun yá blocks the derivation of other semantically related sentences of the paradigm. It is for this same reason that the reader is asked to ignore 10 (c) for the meantime.

We therefore continue the derivation with 10 (b) as input, giving

10 (d) Yá Íbè júrụ m mà₂ Ógù ò nwúrụ anwụ n'ezhi-okwū
 S S

(By abstract yá Mvt opt.)

10 (e) Hwé Ibè jūry m wu mà₂ Ógù Ò nwúry anwu n'ezhi-okwū.

(By T-Pseudo-Cleft - Oblig.)

(f) Hwé Ibè jūry m wu mà₂ Ógù Ò nwúry anwu n'ezhi-okwū.

(By T - Relat₁ - oblig.)

The application of the necessary Phonological rules to 10 (f) yields the acceptable sentence, 10 (g), which is equivalent to 8 (b).

(g) Hwé Ibè jūry m wū mà Ógù Ò nwúry anwu n'ezhi-okwū.

10 (h) is the output of an optional application of the Reverse Cleft rule on 10 (f):

(h) Mà Ógù Ò nwúry anwu n'ezhi-okwū wū hwe Ibè jūry m.
 Whether Ogu died in truth is what Ibe asked me:
 Whether Ogu really died is what Ibe asked me.

From the derivational history of the sentences of paradigm 8 given here, the following facts emerge:

- (a) Apart from the first of these T - rules - the Q substitute and Pronoun Copy rule - which is unique to mà₂ complementation, the rest of the T - rules involved here are those that we have established in chapter 6 in connection with Nà complementation.
- (b) The ordering of the rules remains exactly the same, with the abstract Yá Movement rule preceding the Pseudo-Cleft rule, and Relat₁ and Reverse Cleft rules following in that order.
- (c) The members of the paradigm are comparatively fewer in number because of the semantic fact that Ma₂ NP complements never undergo such transformations as the Nominalisation of the Complement sentences (T - Relat₂) which Factive Nà - Complements generally undergo.

- (c) The explanation is that Ma_2 Interrogative Complements, not being factive, cannot undergo such definitization transformations as T-Relat₂ (cf 5.1.2. p. 283 ff).

However, the number 9 paradigm present a slightly different picture from what was observed with regard to paradigm 8, as the following exposition shows:

11 (a) $\left[\begin{array}{c} \text{Anyi} \\ \bar{S}_o \end{array} \right] \text{ gbágha àgùgò } \text{yá} \left[\begin{array}{c} \text{Q} \\ \bar{S}_i \end{array} \right] \text{ mà úmùákā à h̃wùrù ndi ohĩ } \right]$
Base

(b) Anyi gbágha àgùgò yá mà úmùákā à h̃à h̃wùrù ndi ohĩ

(By T - Q-Substitute & Pro Copy - opt)

As is the case with derivation of paradigm 8, the deletion of the abstract pronoun yá has been ignored for reasons which are now obvious; 11 (b) is, however, a well-formed sentence, the necessary phonological rules having applied.

From 11 (b) we derive 11 (c) by a T-rule which we describe here as complement Object \bar{S} Preposing.

Schematically, the rule of Complement Object \bar{S} Preposing is given as follows:

Complement Object \bar{S} Preposing (Opt.)

SD	:	NP	-	Verb	-	N	-	Ma_2		S	-
						[Yá]					
		1	-	2	-	3	-	4			-

Process : Attach 4 as the left sister of 1

SC : 1 + 4 3 \emptyset

Note : It seems that all ma_2 complement verbs permit the application of this rule to their Object Complement. The temptation to make it a lexically specified rule has been resisted for want of evidence in support of such an analysis.

It is the application of the above rule to 11 (b) which produces sentences such as 11 (c) as output.

11 (c) M̀à ǔm̀ùákā à ǎà ǎẁur̀ù ndi oĩĩ, anyĩ gbágha àg̀ugò yá:

Whether these children saw any thieves, we are still debating about it.

The following examples illustrate the same fact:

(d) Ányĩ t̀ughakwa ánya m̀à₂ ǎà gadur̀ù agád̀ù

We are expecting still whether they arrived.

We are still expecting to hear whether they arrived.

(e) M̀à ǎà gadur̀ù agád̀ù, anyĩ t̀ughakwa ánya yā.

Whether they did arrive, we are still expecting to hear.

(f) Ányĩ ceghekwe m̀à₂ udhó g̀à adí

We are still pondering whether peace will be.

We are still pondering as to whether there will be peace.

(g) M̀à udhó g̀à adí, anyĩ ceghekwe yá.

Whether there will be peace, we are still pondering about it.

Although all the foregoing examples have their matrix verbs in the present progressive tense/aspect, it does not mean that this rule of Object Complement \bar{S} Preposing is blocked if the tenses of verbs were other than the progressive present. The following examples are well-formed, regardless of the tense of the m̀à₂ - complement verbs:

(h) M̀à ǎà gadur̀ù agád̀ù, anyĩ $\left\{ \begin{array}{ll} t̀uchara & ánya \ yā \\ at̀úola & anyā \ yā \\ g̀à \ at̀ú & anya \ yā \end{array} \right\}$

(i) M̀à udhó g̀à adí, anyĩ $\left\{ \begin{array}{ll} cere & yá \\ écééle & yā \\ g̀à \ écé & ya \end{array} \right\}$

Similarly, all verbs which in the Negative Form take the m̀à₂ Interrogative Complement are also subject to this rule. In this respect, most Ǹà - Complement taking verbs will take M̀à₂ Interrogative Complements when they are in the Negative form.

As an illustration of this fact, consider the following examples, in each of which the Matrix Verb is in the Negative:

- 12 (a) Mádḥù ámāñḥìì ma₂ È kwúhyèrè yá ekwuhyè.

Person knows not whether One offended him by talking:

No one knows whether people offended him by their utterances.

- (b) Ma₂ È kwúhyèrè yá ekwuhyè, mádḥù

Whether people offended him by their utterances, no one ámāñḥìì.

knows.

- 13 (a) Díkhē aghṭàbele ma₂ Ò wú ya jhèé

Dikhe understand not have whether is it he goes

ma₂ Ò wú ya nòdí n'ulò.

or is it he stay at home:

Dikhe has not understood whether he is to go or remain at home.

- 14 (a) Ò díì onye gwāra umù ndhomè ma₂

There is not person (who) told the women whether

ñà ga eshí ifi ma₂ Ò wú rayisi.

they will cook food or it is rice:

Nobody told the women whether they should cook native food or rice.

- (b) Ma umù ndhomè ga eshí ifi mà Ò wú rayisi,

Whether the women should cook food or rice,

Ò díì onye gwāra ñà.

nobody told them.

- 15 (a) Àgwa gí egōshìbele ma₂ mái gbūghe gí.

Manner your reveal not have whether wine is killing you:

Your behaviour has not revealed whether you are drunk.

15 (b) Ma[`] máí gbūgha gí, àgwa gí egōshìbela yá

Whether you are drunk, your behaviour has not revealed it.

16 (a) Òdè' ākwụkwọ akāññi ma₂ anyi abyázuòle.

Writer of book said not whether we have come complete:

The secretary did not say whether we have all come.

(b) Ma₂ anyi abyázuòle, Òdè' ākwụkwọ akāññi.

Whether we have all come, the secretary did not say.

These examples 12 - 16 demonstrate conclusively that any verb in the Negative which takes Ma₂ Interrogative Complement will permit the optional application of the Complement Object \bar{S} Preposing.

From 11 (c) 11(e) 11 (g) and 15 (b), it will be further observed that the yá abstract pronoun is retained along with the Matrix Sentence after the preposing of the complement object \bar{S} . We have not yet discovered any syntactic explanation for this. The abstract pronoun head may still be present in Surface Structure even if one goes through the alternative set of T - rules such as the Yá Abstract Movement rule, Pseudo Cleft and Relativization (cf 10 (a)-(b), and (d)-(h)).

Let us take sentence 9 (c) for example, repeated here for ease of reference:

9 (c) Hwé' anyi gbāgha àgụgọ yá wū mǎ ỳmụákā à hā h̃wụrụ ndi oñi

For a sentence such as this, Pseudo Cleft must have consisted in a transformational insertion of hwe in view of the presence in surface form of the yá which should have been moved to initial position and replaced by hwé' through a morphophonemic rule. But this insertion of hwé' is optional in Pseudo-Cleft sentences like 9(c) since 9 c(i) without yá in surface form and, consequently, without a transformationally inserted hwé' is equally grammatical.

9c(i) Hwé' anyi gbāgha àgugo wú mà úmùákā à ña ñwùrù ndi oñi.

So far, the structures we have examined involve either single or double questions embedded as an NP. Closely related to double questions in structure is the Either - Or - Construction in Igbo.

We illustrate this point with a few examples:

17 (a) Ácọ́rọ́ m ma₂ ọ́ wú mma,
ma₂ ọ́ wú ọ́g'ụ.
Want I whether it be a knife,
whether it be a hoe:

I want either a knife or a hoe.

(b) Ácọ́rọ́ m mma ma₂ ọ́ wú ọ́g'ụ.
Want I a knife or it be hoe.

I want (either) a knife or a hoe.

17 (b) is related to 17 (a) by some form of Conjunction reduction, the details of which are not relevant here. But it is necessary to point out that the reduction rule deletes ma ọ́ wú provided that what follows it is an NP, and not a sentence. This explains the reason why 18 (a) cannot be so reduced.

18 (a) Ányị́ cọ́rọ́ ímā ma₂ ọ́ ji erí anū
We want to know whether he does eat meat
ma ọ́ ji erí aẓū
whether he does eat fish: We want to
know whether he eats meat or fish.

- 18 (b) Anyị́ cogó ímā́ mà́ Ọ́ jì erí́ anū́
 We want to know whether he eats meat
 mà́ Ọ́ wú́ aṣù́ .
 whether it is fish:

We want to know whether he eats meat or fish.

18 (b) cannot be described as a reduced form of 18 (a) because one expression mà́ Ọ́ wú́ has merely been substituted for another - mà́ Ọ́ jì erí́.

Whatever the nature of the deletion rule relating 17 (b) to 17 (a), it must be very restricted in its application.

Observe, however, that in both 17 & 18, the tone pattern of the mà́₂ - complements is that of an interrogative sentence. The Igbo equivalent of English either - or - construction is in the form of simple Yes/No question in the second disjunct thus:

- 19 (a) Í ga ańú́ biá (sì) Ọ́ wú́ wishiki?

You will drink beer or is it whisky?

Will you drink beer or whisky?

- (b) Gótere m̄ mai nkwó mà́ Ọ́ wú́ mai ngwó.

Buy for me oil palm wine or rafia palm wine

- (c) Mà́ Ọ́ wú́ m, mà́ Ọ́ wú́ ya, otú ga ánó ya.

Whether it is I whether it is he, one will be in:

Either he or I will be in.

- (d) Ógu ma Ọ́ wú́ nwié yá gá ejishi ikhē bya.

Ogu or it is wife his must endeavour come:

Ogu or his wife must endeavour to come.

It is obvious from the foregoing examples that the Igbo equivalents of English either - or - constructions are Yes/No questions.

Summary

In this section on ma interrogative complementation, we have demonstrated the close relationship between this sub-category of NP - complements and their Nà Indicative counterpart: the same set of T-rules apply to both types in the same order (cf p. 239 et seq.) We have brought out the uniqueness of mā₂ NP - complements by showing that the following T-rules

(a) The Q-Substitute and Pronoun Copy

and (b) The Complement Object S Preposing

are peculiar to them. It has also been pointed out (p.342) that for such verbs as igba agugo 'to doubt, argue', which have inherent complements the application of Pseudo-Cleft to their mā₂ complements involves an optional insertion of hwe' for the simple reason that for some speakers the ya' proform remains unconverted to hwe in the Pseudo-Cleft transform. Thus, the following 20 (a) and 20 (b) are both grammatical and acceptable in the dialect being described here.

20 (a) Hwe' anyi gbāra àgugo wu' mā 0 žuru ohi.

(b) Hwe' anyi gbāra agugo ya' wu' mā 0 žuru ohi.

Thing we argued it is whether he stole :

What we argued about is whether he stole.

6.3.0 Embedded Kèdú Questions

In 7.1, we demonstrated that the two types of Questions in Igbo - Yes/No and Kèdú - Questions derive from two different underlying structures figs. 1&3. Each of them is subject to a different T- rule: the Q-Substitute and Pronoun Copy rule for Yes/No Questions, and Pronoun Copy and Kèdú Deletion for the non-periphrastic version of Kèdú - Questions. The deep structure specification of Kèdú in Kèdú - Questions makes the derivation of the periphrastic transform easy and elegant.

In this section, we shall demonstrate that it is the periphrastic transforms of Kèdú - Questions which are embedded as NP to complement-taking predicates. It will also be demonstrated that although Kèdú - Questions do function as NP's, they have a completely different internal structure from NP - complement such as Nà Indicative or Mà Interrogative Complements. For example, with Nà and other NP -complements, the NP has been shown to be of the following internal structure (a)

(a) NP \longrightarrow Yá Comp S

whereas with Kèdú NP, the structure is that of a complex nominal such as (b)

(b) Nom \longrightarrow N S

in which N must be co-referential with another N which is directly dominated by the embedded S, as is shown in Fig. 6 where N_1 is co-referential with either N_2 or N_3 .

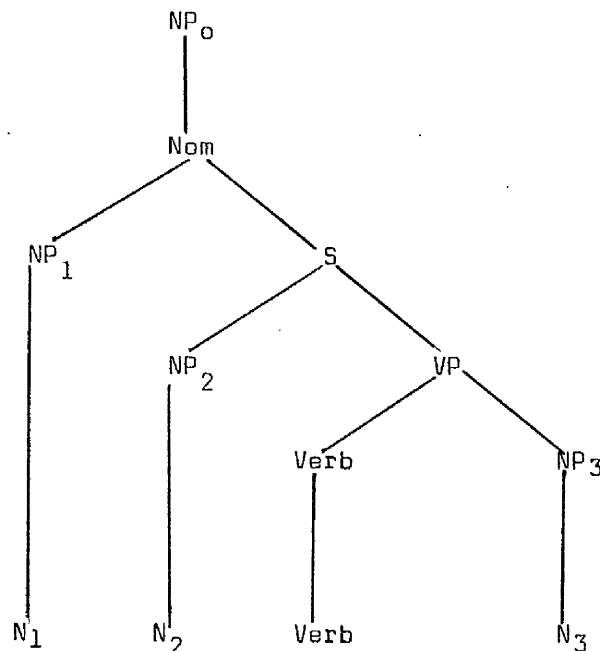


Fig. 6

$$N_1 = \left\{ \begin{array}{c} N_2 \\ N_3 \end{array} \right\}$$

In other words, while the N in (a) is the only term in its system, the N_1 in the above figure is one of an open set.

As we pointed out in 6.1. p.330, the first T-rule to which the structure underlying Kedu-Questions is subject is either of the Pronoun Copy and Kèdú Deletion rules (which yields non-periphrastic Kedu-Questions) or a Movement rule which is the first step in the generation of the periphrastic transforms. Only the second alternative is relevant here, and we give the rule as follows.

The Interrogative Movement Rule

SD : Kèdú NP Verb Interrogative
 1 2 3 4

Process : Attach 4 as the left sister of 2

SC : 1 4 + 2 3 \emptyset

Note : This rule is blocked where 2 is either of the interrogatives ònyé and gírí.

The Interrogative Movement is the last T-rule to apply to structures such as the above in the derivation of the question type under discussion. As we pointed out earlier on (cf 6.1. p.332) it moves the interrogatives to a position where they are immediately preceded by Kèdú, thus triggering the following obligatory morphophonemic rules which effect morpheme changes, thus

SD : Kèdú Interrogative NP Verb
 1 2 3 4

$$\left[\begin{array}{c} \left\{ \begin{array}{c} \text{ònyé} \\ \text{gírí} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{òlìá} \\ \text{ánáá} \end{array} \right\} \\ \left\{ \begin{array}{cc} \text{òlé} & \text{mgbu} \\ \text{ná} & \text{òléé} \end{array} \right\} \end{array} \right]$$

SC :
 (i) 1 $\left[\begin{array}{c} 2 \\ \text{hwe} \end{array} \right]$ 3 4

Condition : 2 = gírí

(ii)	1	$\begin{bmatrix} 2 \\ \text{ónyè} \end{bmatrix}$	3 4
Condition		2	= ònyé
(iii)	1	$\begin{bmatrix} 2 \\ \text{ótho} \end{bmatrix}$	3 4
Condition		2	= òlía/àháá
(iv)	1	$\begin{bmatrix} 2 \\ \text{ébe} \end{bmatrix}$	3 4
Condition		2	= ná òléé
(v)	1	$\begin{bmatrix} 2 \\ \text{mgbu} \end{bmatrix}$	
Condition		2	= òlé mgbu

What happens in this particular subset is a reduction of the interrogative generated by the Base. The output of these morphophonemic rules is the input to the Tone rules discussed in 3.5.

Before we discuss these rules any further, let us see their application in the derivation of some sample sentences of the language:

- 21 Kèdú òhwe $\begin{Bmatrix} \text{únú} \\ \text{únú} \end{Bmatrix}$ gà írī n'anyāšy?
- What (is) thing you will eat in evening?
- What will you eat in the evening?

- 2 The only observable difference is in terms of the tone pattern which changes from low-high to high-high. Because of this fact, it is possible to analyse items such as onye as toneless morphemes whose tone pattern is structurally determined. For example, the low-high tone pattern occurs in Questions and Imperatives, thus:

Ònyé byàra?	Who came?
Ì h́wụrụ ònyé?	Whom did you see?
Ònyé anwùna :	Let nobody die. Ònyéanwùna is an Igbo proper name.
Ònyé fùtá, ònyé fùtá:	Let everybody come out!

The high-high tone pattern, on the other hand, occurs whenever the lexical item is modified as in

Ònyé oma	- A good fellow/person
Ònyé ẹ́	- This person
Ònyé ahyā m	- My customer
Ònyé na ākpụ ụ́zụ	- a blacksmith

- 22 Kèdú onye Ogũ gbākhwùjhere ké mgbu éci?
 Who (is) person Ogu ran meet since time yesterday:
 To whose protection has Ogu run since yesterday?
- 23 Kèdú otho anyị dī tháà?
 What (is) manner we are today? : How are you today?
- 24 Kèdú ebe ùzugbu ùmùákā à khwojhe?
 Which is place all children these are trooping :
 Where are all these children trooping down to?
- 25 Kèdú $\left\{ \begin{array}{l} \text{mgbu} \\ \text{og'e} \end{array} \right\}$ ógǔ byàra?
 What is time inlaw came?
 When did our in-law come?

The Deep Structure of these sentences is as shown in Fig. 3 p.372.

To this we apply the optional rule of Interrogative Movement thus:

- 21 (a) Kèdú unù ga erí gírī n'anyâsū (Base)
 (b) Kèdú gírī unù ga erí n'anyâsū (By opt. Interrog. Mvt)
 (c) Kèdú hwe unù ga erí n'anyâsū? (By oblig. Morphophonemic rule)
 (d) Kèdú hwe $\left\{ \begin{array}{l} \text{unũ} \\ \text{unu} \end{array} \right\}$ gà erí n'anyâsū? (By oblig. Tone rules.)

21 (d) is the same as 21 and is well-formed.

Now let us apply the same set of rules to the following 22 (a)

- 22 (a) Kèdú Ogù gbākhwùjhere ònyé ke mgbu éci ? (Base)
 (b) Kèdú ònyé Ogù gbākhwùjhere ké mgbu éci ? (By opt. Interrog. Mvt)
 (c) Kèdú ónyé Ogũ gbākhwùjhere ké mgbu éci ? (By oblig. Morphophonemic rule)
 (d) Kèdú ónyé Ogũ gbākhwùjhere ké mgbu éci? (By oblig. Tone rules)

22 (d) is well-formed and the same as 22.

- 23 (a) Kèdú ànyị dì ańáá tháá ? (Base)
 (b) Kèdú ańáá ànyị dì tháá ? (By opt. Interrog Mvt.)
 (c) Kèdú otho ànyị dì tháá ? (By oblig. Morphophonemic rule)
 (d) Kèdú otho anyị dì tháá? (By " Tone rules)

23 is the same as 23(d), both are well-formed.

- 24 (a) Kèdú ùzugbu ỳmỳákā à khwojhe n'olée ? (Base)
 (b) Kèdú n'olée ùzugbu ỳmỳákā à khwojhe ? (By opt. Interrog. Mvt.)
 (c) Kèdú ebe ùzugbu ỳmỳákā à khwojhe ? (By oblig Morphophonemic rule).
 (d) Kèdú ebe ùzugbu ỳmỳákā ǎ khwòjhe? (By oblig. Tone rules)

24 (d) is the same as 24, an acceptable Igbo sentence.

Going through the same process, we will derive 25.

From the foregoing examples, it is obvious that all lexical items with final low tones in deep structure behave tonally in either of the following ways:

- (a) They either develop as a rising glide, or
 (b) Have their final low tone raised to a high one whenever they are in subject relation to the verb.

This tonal behaviour is characteristic of relativized clauses, as we have shown in 2.4.2., 3.5 and 3.6.

Observe the stages through which we have derived sentences such as 21-25. We have likened the Interrogative Movement rule to the object NP Movement rule given in 5.1.0 in connection with the nominalisation of factive Nà - complements, and we have argued on page ff that the three movements rules given here:

- (i) Object NP Movement (p. 267)
 (ii) Verb Complement Movement (p. 277) and
 (iii) Interrogative Movement (p. 332)

can all be subsumed under one Movement rule since they are subject to the same or similar constraints, namely: they all operate in relativization; each of them moves a constituent from an object to a subject position, and the constituent moved is an object Np, if the verb involved is a transitive one; a verb complement, if the relevant verb is one which takes an inherent complement as part of its citation, form, or an intransitive verb, as in the following sentence:

Ó nwūrū anwū - he died -

where ánwū is a verb-complement or what has been traditionally described as a participle; the same rule moves an interrogative directly dominated by VP, if the structure in question is a Kèdú - Question. In other words, we can say with regard to the periphrastic transforms of Kèdú - Questions that when we relativize the underlying structure in which the item kèdú is specified, the result is a well-formed periphrastic kèdú question - a relative clause.

The pertinent syntactic facts about Kèdú are as follows: Its immediate constituent is always an NP, and this may be expanded by an S which is always a relative clause. And the tone patterns which we have generated in examples 21-25 justify the above assertion, being such as one normally associates with Igbo relative clauses.

The demand that any sentential structure immediately after Kèdú must be relativized entails, therefore, the movement rule described here and the obligatory morphophonemic rules triggered by this movement rule, as well as the Tone rules which generate the tone patterns of all Nominal constructions in the language (cf 3.5 & 3.6 where it is shown that all Igbo NP's - N ≠ N or N Det or NP S (relative clauses) - are all subject to the same tone rules).

Furthermore,

$\left. \begin{array}{c} \text{Kèdú} \\ \text{̀ndíí} \\ \text{̀óléé} \end{array} \right\}^3$

are unique in Igbo in being the only lexical items, to our knowledge, which can question an NP without the need for any Copula:

26 (a) Kèdú gĩ ?

Where you? : Where are you?

(b) ̀Ndíí nnà ̀únù?

Where father your (pl) : Where is your father?

(c) ̀Ndíí akhwa wāra āwa?

Where is the broken egg?

It is for this reason that we suggest that sentences such as 21-25 be represented by the following surface structures Fig. 7 with a zero copula - that is a copula node for which no lexical insertion ever takes place irrespective of the tense of the would-be copula.

3 It is this uniqueness of Kèdú and ̀ndíí which has made them popular Igbo greetings:

(a) ̀Ndíí otho i m̀ère? Central Igbo

(b) Kèdú kà i' m̀èlụ? Onitsha

How do you do?

The shortened form of (a) and (b) above for most urban dwellers is simply Kèdú; this is the Igbo equivalent of the French 'Ça va?' or the English 'How'? But for the more conservative speakers who do not want to 'powder their tongue with Ijekoebee' (I jekọ èbée the derogatory name for Onitsha dialect) the following forms of greetings persist:

Ò m̀éne àńáá? (Mbaise - Central Igbo) How is it?

Ò mé àgáá? (Nsukka) - Northern Igbo How is it?
What is wrong?

̀Ndáá how? (Ọhafia etc - Southern Igbo) How is it?

̀Ndée (Enugu/Udi - Northern Igbo) How is it?

It is the popularity of Kèdú both as greeting and marker of Type 2 Questions that determined its choice as the descriptive label for Igbo Equivalents of English WH- Questions.

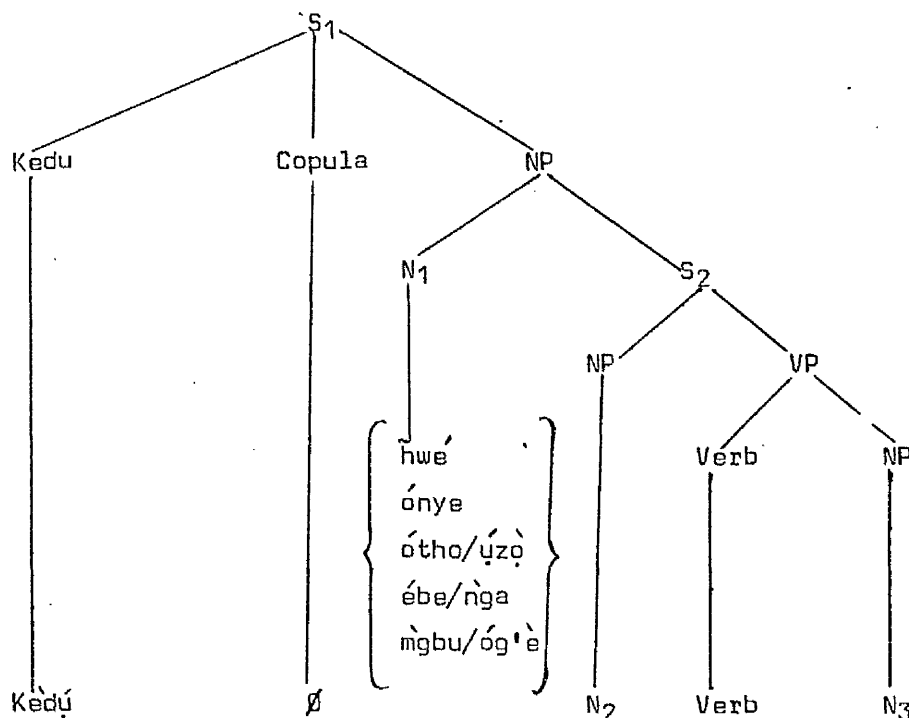


Fig. 7

If this suggestion is accepted, then the problem of what to do with some Kèdú questions for which there are no corresponding non-periphrastic versions is resolved. For example, 27-31 have both (a) and (b) versions, but 32 & 33 have only the (b) form:

27 (a) Ònyé méré gí⁴?

(b) Kèdú onye méré gĩnĩ⁵?

Who made you cry?

- 4 This is the normal question that one puts to a crying child; the full form is something like this:

Ònyé méré gí ēbee akhwā?

Who made, you cried cry : Who made you cry?

The deletion which has been made in 27 is always recoverable from the context of situation, that is, it is not a technically recoverable deletion.

- 5 -nĩ is a popular suffix in this dialect; its use with the verbs of relativized clauses is determined by the following syntactic facts: If the verb of the Relative clause is an Intransitive one, then a -nĩ suffix is obligatory as in 34 (b) and 35(b) - where the verbs are imē Intr - to happen, and ibyā Intr - to come. With such obviously transitive verbs as imē Tr. - to do - (36) and ihwū to see (37), the -nĩ suffix is uncalled for.

- 28 (a) { Gírí m̀ere yá ? }
 (b) { Kèdú ħwe m̀ere yā? } What happened to him?

- 29 (a) { Í m̀ene ànáā? }
 (b) { Ndíĩ otho I m̀ere? } How do you do?

- 30 (a) { Ọ́ byara olé m̀gbu? }
 (b) { Ndíĩ m̀gbu Ọ́ byàrà? } When did he come?

- 31 (a) { Ànọ ħi n'olée? }
 (b) { Kèdú ebe anọ ħi? } Where are they?

- 32 (a) ? ?

- (b) { Kèdú
 Ndíĩ
 Olée } ọ́ ọ́ fùru ahyā?

Which road leads to the market?

- 33 (a) ? ?

- (b) Ndíĩ otho E jì akpú ọ́ ọ́?

What manner one uses blacksmith:

How does one learn to blacksmith?

In order to show that sentences such as 27 (a) and (b) are complementary to each other, it is necessary to point out that only the (b) (Kèdú) versions can be negated, never the (a) forms:

- 34 (a) ? Gírí na ēmeħiĩ ?
 (b) Kèdú ħwe na ēmeħiĩnĩ? What didn't happen?

- 35 (a) ? Ọnyé na ābyaħiĩnĩ
 (b) Kèdú onye na ābyaħiĩnĩ?
 Who did not come?

- 36 (a) * Ọgù Ọ́ mēħiĩ gírĩ?
 (b) Kèdú ħwe Ọgù ná ēmeħiĩ?
 What didn't Ogu do?

37 (a) * Ógù Ò h̃wūh̃iì onye⁶

(b) Kèdú onye Ógù ná āh̃wūh̃iì
Who did Ogu not see?

38 (a) * Ò byāh̃iì òlé m̃gbu?

(b) Kèdú m̃gbu ná Ò byāh̃iì?
What time did he not come?

39 (a) * Íbè Ó bih̃iì n' oléé?

(b) Kèdú ebe Ibè ná ēbih̃iì?
Where did Ibe not live?

40 (a) * Anyi agāh̃iì imē nwa ah̃i` anáá?

(b) Kèdú otho anyi na āgañh̃iì imē nwa ah̃i?
How should we not treat the child?

34 (a) and 35 (a) are merely questionable as opposed to being totally deviant like 36 (a), 37 (a), 38 (a), 39 and 40 (a) because of the fact that the question words are sentence initial. What this shows is that only the periphrastic versions of Type 2 Questions in Igbo can be negated without any resultant deviance.

The negation of the above Kèdú questions is another strong syntactic piece of evidence in support of our analysis of this question type as relative clauses. Recall that in 2.4.5 we made it clear that all relative clauses, Negative in this dialect have an obligatory Na' auxiliary element. The sentences 34 (b), 35(b), 36 (b), 37 (b), 38 (b), 39 (b) and 40 (b) would be deviant without this obligatory na' element.

Now consider the following 41 (a) and (b) sentences in which the verb is in the Perfect Form:

6 This high-high tone pattern is due to low-tone assimilation; see 2.2.3 on low-tone assimilation.

41 (a) Unu ebiéle n'òléē n'òléē?

You have lived in what place in what place?

Where and where have you lived?

(b) Kèdú ebe nà ébe unu { bìrile?
na' èbiele? }

What are the places in which you have lived?

If we recall that one of the morphophonemic rules of Relativization given in 6.1.0 p.313 ff allows for the optional insertion of the auxiliary na' just in case the verb of the clause being relativized happens to be in the Perfect, then we can understand the choice of verb forms in 41 (b) which, being a kèdú question, has been shown to contain a relative clause as NP.

Summary

In this section, we have shown the transformational processes necessary for the formation of the periphrastic version (kèdú forms) of Question Type 2 - that is the Igbo equivalent of English WH-Questions. We have made a case for analysing kèdú constructions as Kèdú Ø - Copula N S - a complex Nominal structure in which the N and S are in the relation of head and qualifier. Both the T-rules involved in generating kèdú questions and the tone pattern of the resultant output support the relative clause analysis which we shall henceforth assume to be proved.

In the following 6.3.1, we shall demonstrate that the same type of NP which follows *kèdú* in *Kèdú* - Question are also found with certain complement-taking predicates. In the course of this section, it will become obvious that, apart from the structural differences between *kèdú* NP's and NP - Complements, there are other formal distinctions between them - namely, each of them is subject to a different set of T-rules.

6.3.1 *Kèdú* - Questions And NP - Complementation

Bresman (1971) has convincingly demonstrated that WH- is one of the complementizer morphemes of English. This suggests the possibility that equivalent constructions in other languages might be instances of NP - complements. But it happens not to be so in Igbo, a fact which will become more obvious as we examine the following sentences:

- 42 (a) *Ónye m ńwụrụ n'ama nūcha nà dí gị*
 Person (whom) I saw on road resembles completely husband you:

The person I saw on the road very much resembles your husband.

- (b) *Hwě Ibě kwùru gbá anya míri akhwā*

Thing Ibe said can run eye water:

What Ibe said can make one weep.

- (c) *Ótho Ọ kpāra àgwá mashiri m'.*

Manner he behaved pleased me:

The way he behaved pleased me.

- (d) *Ébe Ọ bi ò dì yá ahụ mmā.*

Place he lives is to his body good:

Where he lives suits him.

- 42 (e) Óg'è Ọ́ byàrà wú og'è ānyāshù .

Time he came is time of evening:

The time he came was in the evening.

- 43 (a) Áhya m shí dì ụthí .

Market I am returning is far.

The market from which I am returning is far:

- (b) Íři unu ríghè gà emébi ùnù áfọ .

Food you are eating will spoil you stomach:

The food which you are eating will upset your stomach.

- (c) Ì ĥwúona ọkpa mǎi anyị nūgha mbụ?

You have ever seen type of wine we are drinking before?:

Have you ever seen the type of wine we are drinking?

- (d) Àh̃wúbele ń anụ wā ị zùtaara ń .

Have not seen I meat the you bought for me:

I have not seen the meat you bought for me.

- (e) Ókwu Ogú kwúru na ewé ń iwe .

Talk Ogu talked is causing me anger:

What Ogu said is annoying me.

- 44 (a) Ányị ga ajú yā ĥwe { Abọki / Ogú / Nkata } mère .

We shall ask him thing Abọki/Ogu/Nkata did:

We shall ask him what Abọki/ Ogu/ Nkata did.

- (b) Júfùtá onye byāranī n'ishi ūtutù .

Find out person (who) came in the head of morning:

Find out who came early in the morning.

- (c) Ànyị amāhịi { og'è / mgbu } ńdi oñi byàrà .

We know not time thieves came:

We do not know when the thieves came.

44 (d) Unu ákābèlè ébe ò nwūrū

You say have not place he died:

You have not said where he died.

(e) Í gà akówaniri ānyị otho eg'o ohi

You (Sg.) will explain to us manner money that

jiri gwú n'abali atọ .

got finished in days three:

You will explain to us how that money got finished within three days.

A look at the underlined constructions shows how closely related in form to the periphrastic version of Kèdú - Question they are : Apart from the absence of the item Kèdú itself, the structures are identical with the complex NP's which we associate with kèdú-questions. 42 (a)-(e) are simple sentences, although their NP'S are complex in structure. Their nominal heads are those with which we are already familiar. In 43 (a)-(e), on the other hand, we have equally complex NP's of a similar structure to those in 42, but in this case, the nominal heads are Igbo nouns taken at random - áhya, íñi, maị, any, and ókwa. The verbs involved in both 42 & 43 are not, strictly speaking, complementizable verbs of the Language. But in 44 (a)-(e), the verbs have been carefully chosen because they are complement-taking (complementizable) verbs. Although the formal properties of the underlined complex NP's are similar, if not identical, in 42 and 44, those in 44 (a)-(e) must be associated with kèdú questions in the sense that those of 42 (a)-(e) must not, a fact which is reflected by the following 45 (a)-(e) :

45 (a) Kèdú hwe $\left\{ \begin{array}{l} \text{Abọkị} \\ \text{Ogu} \\ \text{Nkátá} \end{array} \right\}$ mère?

What did Abọkị etc. do?

45 (b) Kèdú onye byàra n'ishi ùtùtù?

Who came very early in the morning?

(c) Kèdú og'è ndi oñi byàra?

When did the thieves come?

(d) Kèdú ebe ọ nwūrụ?

Where did he die?

(e) Kèdú otho eg'o oñi jiri gwú n'abali ató?

How did that money get finished within three days?

The matrix verbs involved in 44 (a)-(e) are such that they demand an answer to each of the above questions.

Despite the fact that these matrix verbs are, strictly speaking, complementizable verbs, and the complex NP's express the questions - what, who, where, when and how? - they are not instances of Noun Phrase complements: they lack the structure of NP complements, having been shown to have a Relative Clause Structure; they do not have any transformations in common with NP - Complements except of course, the Pseudo-Cleft rule which applies to Relative Clauses as well as to NP - Complements. For example, for each of the sentences of 42-44, there can be only this type of transform, which is the output of the Pseudo-Cleft rule:

46 (a) Hwé anyị gá ajú yá wū hwe Abọkị mèrè.

What we shall ask him is what Aboki did.

From sentences such as the above, we can derive other stylistic variants such as 46 (b) and 46(c):

(b) Hwé Abọkị mèrè wú hwe anyị gá ajú yá.

(c) Hwé wū hwe anyị gá ajú yá wú hwe Abọkị mèrè.

The derivation of 46 (b) and (c) is tied up with the Subject of Topicalisation or focus, the details of which are not relevant here.

Observe that although these sentences in 42-44 are subject to the optional Pseudo-Cleft rule, the rule in these cases consists of a transformational insertion of hwe' rather than its derivation from a deep structure pronominal head Ya', as in the case of NP Complementation. This, again, is a consequence of the structural differences between the two construction types, NP - Complements and Relative Clauses.

In view of these differences in underlying structure, and the fact that the two Clause types do not have the essential T-rules in common, except the optional Pseudo-Cleft rule, the complex Nominal Structures we have been examining here can never qualify as NP - Complements. What seems to be the true picture is this; Most, if not all, Igbo verbs can take a complex Nominal as Subject or Object, and these include the sub-category of verbs involved in Noun Phrase Complementation. It is reasonably accurate to make this assertion with regard to Complex Noun Phrases in Igbo: Any complex Noun Phrase in Igbo which is not an NP - Sentential complement is a Relative Clause.

Since most, if not all verbs will take Relative Clauses as subject or object while comparatively fewer will take NP - Complements, it follows that the ability to take NP - Complements rather than Relative Clauses is the appropriate criterion for sub-categorising some verbs in the language. Although the matrix verbs involved in 44 (a)-(e) are marked for Ma_2 Interrogative Complements, they may also take any other type of Complex NP, that is, relative clauses, for example. In these examples 44 (a)-(e) the verbs, though complementizable, are to be seen as taking relative clauses as Subject or Object. Thus, 44 (a)-(e) and other sentences like them are the Igbo equivalent of English WH- Questions, yet in structure they are unequivocally relative clauses, as has been demonstrated throughout this and the foregoing sections.

For example, the following sentences 47 (a) and (b) are ambiguous as between the Interrogative and the non-Interrogative meanings, but their internal structure is the same - that of a Nominal and a qualifying clause, in other words, a relative clause:

47 (a) Àmáḥīī m ḥwe 0 rīri.

Know not I thing he ate:

I do not know what he ate.

(b) 0 gwáḥīī anyī ḥwe ezē kwùru.

He did not tell us what the king said.

These two sentences are ambiguous between the following readings:

(i) ókpa ḥwē 0 rīri
the type of thing he ate

(ii) 0 rīri gīrī
he ate what : What did he eat?

The first reading (i) entails the meaning : 0 rīri ḥwe - 'he ate something', whereas the second (ii) does not. The same explanation can be given for the ambiguity of 47 (b).

But the above type of explanation is possible only for those questions which have both the non-periphrastic as well as the periphrastic forms such as 48 (a) and (b) :

48 (a) Gīrī mēre?

What happened?

(b) Kèdú ḥwe mērenī? What happened?

But for those Type 2 questions which do not have the 47 (a) version, the above type of analysis does not hold. This type of ambiguity in Igbo cannot be disambiguated by a resort to two underlying structures, such as is the case in English. In Igbo it seems that this type of ambiguity is traceable to the different matrix verbs involved, and not necessarily to different underlying structures because the ambiguity ceases to exist if a different matrix verb is introduced:

48 (c) Acoro m iri hwe O riri
Want I to eat the thing which he ate:

I want to eat the same thing that he ate.

(d) Ámá m ǎwə́ ɔ kwùru.
Know I thing he said: I know what he said.

(e) Njókū z̃hīri m { ħwe } Ø zùtara .
 { àla }
 { anu } what

Njókū showed me { what the plot of land } he bought
 { the plot of land } he bought.
 { the meat }

With sentences such as 48 (c)-(e), there can be no ambiguity because the verbs involved express specific meanings. At times, the same verb which in the affirmative expresses an unambiguous meaning will in the Negative express an ambiguous meaning; this observation is true of verbs like ima 'to know' and many other Na² - Complement - taking verbs which are also Ma² Interrogative verbs in the Negative. Therefore the ambiguity with Complex Noun Phrases in Igbo such as we have been discussing here is due to the lexical verbs involved, and not necessarily to different underlying structures, except in so far as choice of a particular lexical item is part of underlying intention.

conclusion

Kèdú Questions are not instances of NP - Complements: their internal structure as relativized clauses argues very much against such an analysis, and they do not share any essential transformations with NP - Complements, rather the T-rules they undergo are limited to Pseudo-Cleft - rules which are rules shared by both Np - Complements and Relative Clauses. It is because they are relative clauses that Kèdú questions do not discriminate as to their matrix predicates. In other words, Kèdú Questions do not sub-categorise verbs as NP - Complements do.

However, when these Kèdú Questions function as Subject or Object of Complementizable predicates, an ambiguity arises which is traceable not to different underlying structures, but to the lexical verb involved.

6.4 Ótho - Head NP's And Emotive Predicates

Of the complex Noun Phrases in Kèdú-Questions, we would like to consider in more detail those with Ótho as their head. These otho-headed NP's are generally found as Subject to Emotive predicates, or Object of Epistemic verbs, that is, verbs of Learning, Teaching and Knowing and their compounds. We have made an earlier reference to this Subject in 6.1.3 under NP Complementation and Emotive Predicates.

We repeat here some of the examples already cited there :

49 (a) Ótho E jì akwó motò rágburu⁸ onwe ya n'áhú .

Manner one uses drive cars is very difficult:

Driving a car is very difficult.

(b) Ótho A gá {eshí, eji} rúchaa ọ́rụ ọ́ wụ mkpà m.

Way one will use work finish work this is problem my:

How to finish this piece of work is my problem.

(c) Nwíe m ná ámụ ótho E jì akwó motò.

Wife my is learning way one uses drive car:

My wife is learning to drive (a car).

(d) Ọ́ gá macha ótho E jì emé ncà.

He/she now knows manner one employs make soap:

He / she now knows how to make soap.

8 Igbo expresses the meaning, 'very high degree of intensity' by the use of a compound verb whose second root is always the stem of the verb *igbū* 'to kill' which is immediately followed by the reflexive pronoun *onwé* 'self'. For example *imā + igbū* → *imāgbu* in the expressions:

<i>imāgbu</i>	<i>onwé</i>	<i>yā</i>	:	to be very good, worthy, appropriate
<i>ijōgbu</i>	"	"	:	to be very bad, unworthy etc.
<i>ikwūgbu</i>	"	"	:	to be very talkative
I' kwūgburu	onwé	gī	n' okwu:	
You talk kill	self	your	in talk:	You are very talkative.
Ọ́ gbāgburu	onwé	yā	nā	mgba:
				He is a very able wrestler.

49 (a)-(d) have the transforms 50 (a)-(d):

50 (a) Íkwō moto rágburu onwe yā n'ahú .

Driving a car is a very difficult thing.

(b) Írūcha ořu à wú mkpà mí .

Finishing this piece of work is my problem.

(c) Nwíe mí nà ámù íkwō moto .

My wife is learning to drive (a car).

(d) 0' gā macha {ńcā emē }⁹
 {imē ncā }

He/she now knows how to make soap.

We do not claim to know the exact details about the underlying structure of ótho-headed NP's, but the following Fig. 8 is a suggestion which suffices for the meantime for our purposes here.

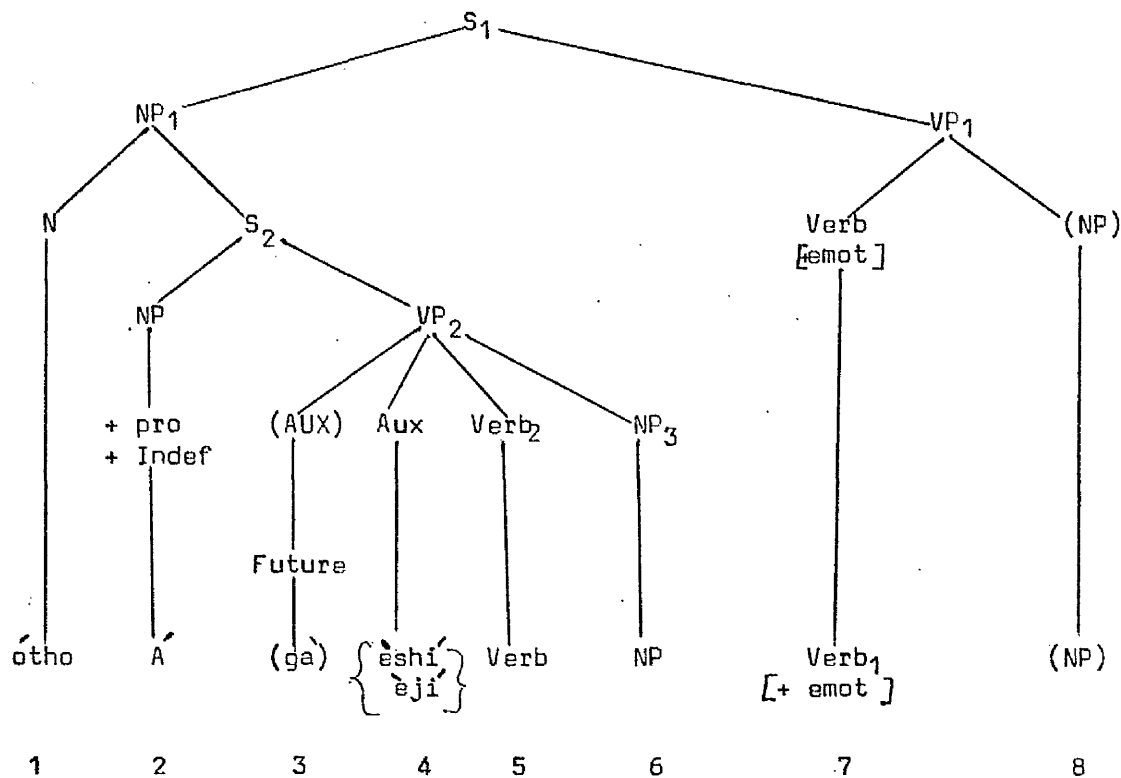


Fig 8

9 The verb ima and its compound have this unique characteristic of allowing a choice in the order of their Infinitive Object Complement as 50 (d) shows. Thus we have

Ogu ma {igwù miri } Ogu knows how to swim
 {miri egwù }

But with other epistemic verbs, there is no such choice.

0' mughá igwù miri : He is learning to swim.
" " miri egwù : " " " " "

In the above Fig. 8, the *otho*-headed NP is in subject relation to the main verb which must be an Emotive verb, hence the feature specification [+ emot]. If the NP is in object relation to the verb, such a verb must be an Epistemic verb in order for one to derive sentences such as 50 (a-d) from 49 (a-d). In addition to the above conditions, there is also the tense constraint on the applicability of the relevant transformations which yield 50 (a-d). As can be seen from the internal structure of VP₂, there must be either of the two verbs *shi* and *ji* which we have described as auxiliaries. The future marker *ga* is optional as the parentheses show. Only these conditions - the appropriate category of verb, the Habitual or Future Aspect of Verb₂ - can guarantee the grammaticality of the output of the relevant T-rule here.

The relevant T-rules here are:

- (i) Either (a) Indefinite Agent Deletion (opt.)
 Or (b) Definite Agent Deletion under identity (opt.)
 and

(ii) Infinitivization (oblig.)

The rules are schematically represented as follows:

Agent Deletion Rule 1

SD :

N	NP	(Future)	Aux	Verb	NP	Verb	NP
otho		VP	{ shi ji }			[+ emot]	
1	2	(3)	4	5	6	7	8

Process : Delete 2 and 1

Condition : 2 must be indefinite, or definite and co-referential with 8

SC : \emptyset \emptyset (3) 4 5 6 7 8

Agent Deletion Rule 2 (opt.)

SD: NP Verb N NP (Future) Aux Verb NP
[otho] {shi
ji}

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Process : Delete 4 and 3

Condition: (a) 4 must be indefinite, or definite and co-referential with 1

(b) 2 must be an Epistemic predicate.

SC : 1 2 ~~3~~ ~~4~~ (5) 6 7 8

These two essentially similar rules are needed in order to account for what happens when the two sub-categories of Emotive and Epistemic predicates are involved in otho-headed (Manner) NP constructions. Only one or the other of these two rules need apply to the deep structure shown in Fig. 8.

Agent Deletion, like Equi-NP Deletion, is optional, but once it has applied, it is obligatorily followed by Infinitivization. In this way, Infinitivization here as in Subjunctive Complementation (cf 8.2.0) is contingent on a previous application of a rule of co-referential NP deletion, or of Agent Deletion under the condition of indefiniteness. This situation must be distinguished from what happens in 5.2.0. (where conditional clauses function as subject of Emotive verbs) where Infinitivization is both optional and not dependent on a co-referential NP deletion. Observe, also, that here as in 8.2.0 and 5.2.0, the same tense constraint on the verbs of the matrix and embedded sentences is operational, namely that their tense be future or present, and never past.

We have argued in justification of the transformational relation which we have established between such constructions and their infinitival counterparts in 1.2.0. Sentences such as 50 (a) & (b) are ambiguous; for example, 50 (a) has the following possible interpretations:

(a) How to drive is difficult. (to learn).

(b) Driving (the process of driving) is difficult.

This ambiguity explains why Infinitivization takes place whether the relevant verb is simple present or future. Although the rule of Infinitivization in Igbo has been given in 6.2.0 p. 350, it needs repeating here because of the peculiar structure of the Verb Phrase in this type of construction:

SD :	(Future)	Aux	Verb	NP	Verb	NP
	NP	Verb	ji`	Verb	NP	[+Emot]
	(1)	2	3	4	5	6

Process : (a) Attach the Infinitive marker I- as the left sister of 3, and delete its inflectional suffix, if any.

(b) Delete 1 and 2

Condition : Obligatory

SC : $\emptyset \emptyset$ I + 3 4 5 6

Let us now see the application of these rules in the derivation of 50 (a)-(d):

51 Nwíe` m' ná` ámu` ótho E ji` akwó` moto` (Base form)
 (a) Nwíe` m' ná` ámu` ji akwó` moto` (By Indef. Agent Del. opt.)
 (b) Nwíe` m' ná` ámu` íkwó` moto` (By Infinit. oblig.)

By applying the rules of phonology (Vowel Harmony rules) to 51 (b), we derive the surface form 51 (c)

51 (c) Nwíe` m' ná` ámu` íkwó̄ motō.

This is exactly the same sentence as 50 (a).

52 Ótho E ji` akwó` moto` rágburu onwe ya ná` ahú. (Base Form)
 (a) Ji` akwo moto` rágburu onwe ya ná` ahú. (By Indef. Agent Del. opt.)
 (b) Íkwó` moto` rágburu onwe ya ná` ahú, (By Infinitiv. oblig.)
 (c) Íkwó̄ motō rágburu onwe yā ná` ahú. (By Phon. rules oblig.)

52 (c) an acceptable sentence is the same as 50 (b).

Thus, these two examples are sufficient to illustrate the fact that only two stages are needed for the derivation of any of 50 (a) - (d) from 49 (a) - (d).

From these illustrations, it is necessary to emphasize the following fact about Infinitivization in Igbo:

Only the main verb carries the infinitive marker, the harmonising I- prefix. This means that all dangling auxiliary verbs become deleted as a consequence of infinitivization.

Next, let us turn our attention to those conditions which must be met in order for Agent deletion to take place in Igbo. We shall test these conditions in turn. First, the categories of verbs in the matrix sentence must be either Emotive or Verbs of Learning and Knowing and Teaching, and the verb which undergoes Infinitivization must be Future or Habitual in Aspect.

Consider the following sentences:

53 (a) Ányị̀ aḥwuna otho oke jì atụ ọ́nụ̀

We have seen how rat makes hole :

We have seen how a rat makes its hole

54 (a) Ányị̀ aḥwuna otho E jì egwú jī

We have seen how one digs up yams.

We have seen how yams are dug up.

53 (b) * Ányị̀ aḥwuna oke ịtụ ọ́nụ̀

54 (b) * Ányị̀ aḥwuna ịgwū jì

53 (b) is deviant because of the violation of the following two conditions: the noun òké - 'rat' in the ótho-NP in 53 (a) is definite, but without a corresponding co-referential NP in the matrix sentence. Secondly the matrix verb ìhụnụ̀ - to see - is neither an emotive nor an epistemic verb.

54 (b), on the other hand, is deviant because of the violation of only the second of the above two conditions. Observe that the Tense/Aspect condition is met in both 53 and 54.

Now examine 55 - 56:

55 (a) Ọ́ na` akówa otho E jì` agbá m̄gba.
He is explaining how to wrestle.

(b) * Ọ́ na` akówa igr̄ba m̄gba.

56 (a) Ọ́ gūgha otho E jì` emé nshi egbè.
He is reading how one makes gun powder.

He is reading about how to make gun powder.

(b) * Ọ́ g'ūgha imē nshi egbè.

55 (b) and 56 (b) are deviant for the same reason that the two matrix verbs involved *íkówa* and *ig'ū* are neither Emotive verbs nor verbs of learning, teaching or knowing.

Now consider the following 57 - 59 in which every other condition has been met except that of Tense/Aspect constraint:

57 (a) Ọ́tho E jìri gbúo yā t̄r̄r̄ n'ányā.

How one killed him was a marvel.

How they killed him was a marvel.

(b) * Ígbū ya t̄r̄r̄ n'ányā.

(c) Ọgbúgbu E gbūru ya t̄r̄r̄ n'ányā.

How/the fact that they killed him was a marvel.

58 (a) Ọ́tho E jìri gbúsh̄ia ñ̄i ni ile d̄i m̄mā.

How they killed them all is good.

How/the fact that they killed all of them is good.

(b) * Ígbū ñ̄i niile d̄i m̄mā.

(c) Ọgbúgbu E gbūsh̄iri ñ̄i niile d̄i m̄mā.

How/the fact that they were all killed is good.

59 (a) Ótho E jìrì gbálaba ānyị dī égwù .

How one ran away/escaped from us is terrible.

How they escaped from us is terrible.

(b) * Ígbālaba anyị dī égwù .

(c) Mgbalaba A gbālabara anyị dī égwù.

The fact that/how they escaped from us is terrible.

In 57-59, the Tense/Aspect of the verb in the otho-headed 'P's is past rather than Habitual or Future. The violation of this Tense Constraint means that the rules of Agent Deletion and Subsequent Infinitivization are blocked, hence the deviance of 57 (b), 58 (b) and 59 (b). Observe that 57 (c) 58 (c) and 59 (c), on the other hand, are all well-formed; each of these has a lexically derived nominal head qualified by a Relative Clause whose subject NP remains the Deep Structure Subject - the Indefinite Noun Agent. The presence of this Indefinite pronoun Subject in the transforms 57 (c) 58 (c) and 59 (c) is a convincing evidence that no rule of Agent Deletion ever applied. The Infinitive form in Igbo is always compatible with future meaning, very rarely, if ever, associated with past meaning except in the case of factive nominals of the same Phonemic shape but which can always be shown to derive from an underlying Factive Nā complement, (cf. 5.1.2 p.279 ff).

It is thus clear that the violation of any of the conditions being discussed here:- the requirement that the deleted nominal be indefinite, that the matrix verbs be either Emotive Predicates or Verbs of Learning, Teaching and Knowing, and, thirdly, that tense expressed in the complex otho-headed NP be Habitual or Future, never Past - the violation of any of these results in a deviant output.

So far we have talked of Indefinite Agent deletion as if the deleted agent nominal can only be indefinite.

It can also be definite and must be deleted only under identity with another nominal in the matrix sentence.

As evidence of this, consider the following examples:

60 (a) $\acute{O}tho$ $Nwokh\bar{o}$ ga' $ej\acute{i}$ $\check{r}\check{u}chaa$ $\check{q}\check{r}\check{u}$ \check{o} $w\acute{u}$ $mkpa'$ m' .

How Nwokho is going complete this job is my problem

(b) $\left\{ \begin{smallmatrix} ? \\ * \end{smallmatrix} \right\}$ $Nw\acute{o}kh\bar{o}$ $i\check{r}\check{u}$ cha $\check{q}\check{r}\check{u}$ \check{o} $w\acute{u}$ $mkpa'$ m' .

61 (a) $\acute{O}tho$ $Og\check{u}$ ga' $eshi'$ $\left\{ \begin{smallmatrix} ny\acute{a}\acute{a} \\ gb\acute{a}khee \end{smallmatrix} \right\}$ $\check{q}\check{r}\check{y}\check{a}$ $k\bar{e}$ \check{e} $r\acute{a}ra$ $a\check{h}\check{u}$.

How Ogu is going to recover from this illness is difficult.

(b) $\left\{ \begin{smallmatrix} ? \\ * \end{smallmatrix} \right\}$ $Og\check{u}$ $\left\{ \begin{smallmatrix} i\check{n}y\acute{a} \\ i\check{g}b\acute{a}khe \end{smallmatrix} \right\}$ $\check{q}\check{r}\check{y}\check{a}$ $k\bar{e}$ \check{e} $r\acute{a}ra$ $a\check{h}\check{u}$.

62 (a) $\acute{O}tho$ $\check{U}g\check{o}$ ga' $eshi'$ $l\check{o}d\check{u}$ $n'\check{u}dho'$ $t\check{u}gha$ m' $ec\acute{i}ce$.

How Ugo is going to return safely is causing me some thought.

(b) $\left\{ \begin{smallmatrix} ? \\ * \end{smallmatrix} \right\}$ $\check{U}go$ $i\check{l}\check{o}d\check{u}$ $n'\check{u}dho'$ $t\check{u}gha$ m' $ec\acute{i}ce$.

The use of the above signs of question mark and asterisk both in braces shows that the relevant sentence is either deviant or at least questionable. Observe that in 60 (b), 61 (b) and 62(b), the agent deletion rule has not applied. If these sentences of 60 (b), 61 (b) and 62 (b) are at least of questionable acceptability, 63 (b), 64 (b) and 65 (b) are perfectly well-formed for reasons which are soon to become obvious:

63 (a) $\left\{ \begin{smallmatrix} \acute{O}tho \\ \check{U}z\check{o} \end{smallmatrix} \right\}$ $\acute{a}ny\check{i}$ ga' $eshi'$ $gb\check{u}dh\bar{a}$ $y\bar{a}$ $w\bar{u}$ $\check{u}k\bar{a}$ $\acute{a}ny\check{i}$

Way/Manner we shall fell it is our problem.

How we are going to fell it is our problem.

(b) $\acute{I}gb\check{u}dh\bar{a}$ $y\acute{a}$ $w\bar{u}$ $\check{u}k\bar{a}$ $\acute{a}ny\check{i}$

$\left\{ \begin{smallmatrix} Felling \\ To fell \end{smallmatrix} \right\}$ it is our problem.

64 (a) Ọ́tho Ikhe ga' eshi' kwọ́ ụgwọ́ ọ́nye ọ́dọ́ cèghe
 How Ikhe is going to pay debt of person another is -
 Ikhe ecìcè .

thinking Ikhe thought : How Ikhe is going to settle
 another person's debt is causing him some concern.

(b) Íkwù ụgwọ́ ọ́nye ọ́dọ́ cèghe Íkhe ecìcè .

Paying another person's debt is causing Ikhe some anxiety.

65 (a) Ọ́tho m shi' emeri' ñwe ọ́nwụ́nwá . à
 How I am to overcome thing of temptation this
 cùghe m ụ́řà .

is losing me sleep: How I shall overcome this temptation
 is causing me loss of sleep.

(b) Ímēri ñwe ọ́nwụ́nwá à cùghe m ụ́řà .

(How) to overcome this temptation is causing me loss of sleep.

Observe that in each of 63-65, there are two co-referential nominals, and that the first of these two - that in the embedded sentence in the otho-headed NP - has been deleted under identity with the matrix one before Infinitivization could take place. This fact explains the grammaticality of 63 (b), 64 (b) and 65 (b) as well as the ungrammaticality of 60 (b), 61 (b) and 62 (b). Note that the substitution of a co-referential NP in 60 (a), for instance , results in a grammatical 60 (c) thus:

60 (c) { Ířū́cha ọ́řū ọ́ wú mkpā Nwōkho . }
 Nwōkhō ířū́cha ọ́řū ọ́ wú mkpā ya' . }

For Nwokho to complete this job is his problem.

From the two examples in 60 (c), observe that it is Agent Deletion under identity which yields the first one, but a pronominalisation of the matrix, co-referential Np that produces the second sentence.

The deletion of the embedded nominal under identity with a definite nominal in the matrix sentence has been allowed for in our rule of Agent deletion on page 407-8. The same set of conditions that guarantee the well-formedness of the output of Indefinite Agent deletion are also necessary for the grammaticality of the output of Agent Deletion under identity. Each of these deletions must be followed by Infinitivization.

Summary

In this final section of this chapter, we have examined in some detail the syntactic behaviour of *o*tho-headed NP's when the matrix verbs involved in the construction are either Emotive verbs or the Epistemic verbs of Learning, Teaching and Knowing. It has been demonstrated that given the right conditions, one can derive the Infinitival transforms of *o*tho-headed NP's via one of the following optional rules which must be followed by Infinitivization:

- (a) Indefinite Agent Deletion or
- (b) Co-referential Agent Deletion

It has also been demonstrated conclusively that infinitivization here means the infinitivization of the main verb of this rather multiple verb and an obligatory deletion of any other verb which does not bear the infinitive marker - the harmonising I.

What is being stressed here is not that only Emotive Predicates and the Verbs of Learning, Teaching and Knowing may take *o*tho-headed NP's as subject or object, but that only they guarantee that the output of the above T-rules are well-formed, given that other necessary conditions have been met. Verbs from all subcategories of NP - complement-taking predicates can take *o*tho-headed NP's as either subject or object, but they are not subject to the optional application of Infinitivization as Emotive and Epistemic predicates are.

With the subcategory of Factive predicates, *ótho*-headed NP constructions have a factive interpretation, as the following examples show.

66 (a) *Ótho* *o* *jiri* *nwúq* *tùrù* *mádhù* *níile* *n'anya*.

Manner he used die struck people all in eye

The {manner
fact} of his death surprised everybody.

66 (a) may be transformed into 66 (b)

(b) *Ónwù* *o* *nwùrù* *tùrù* *mádhù* *níile* *n'anya*.

Death which he died surprised everybody:

{The fact that
How} he died surprised everybody.

67 (a) *Ótho* *o* *jiri* *mévqo* *ónwe* *ya* *wùtere* *m'*.

{The fact that
How} he disgrace himself pained me

(b) *Mmévq* *o* *mévqo* *onwé* *yā* *wùtere* *m'*.

{The fact that
How} he disgraced himself pained me.

The above pairs of sentences are semantically equivalent, if not syntactically related, and more often than not, it is the factive interpretation rather than the manner one that is entailed, though there seems to be very little to choose between the two possible interpretations. In 5.1.2, p.285, we referred to the preference of speakers of this dialect to express a factive meaning by means of relative clauses rather than by a *Na*-complement. That preference also extends to *ótho*-headed NP's, which have been shown to be relative clauses. As can be seen from the few examples above, what one derives from *otho*-headed NP's with other than Emotive or Epistemic predicates is not an infinitive transform, but another relative clause. For these other verbs Agent Deletion and subsequent Infinitivization rules are blocked.

The above facts suggest that of all the complex nominal constructions which have been shown to be identical in structure with Kedu - Questions, Otho-headed NP's are unique: they have the structure of relative clauses, and, expectedly, are subject to such T-rules as are associated with other members of their group, for example, *ñwé-*, *ébe-*, *ónye-*, and *mgbu-* headed nominal constructions. But unlike these, otho-headed NP's are subject to the rules of Agent Deletion followed by obligatory Infinitivization, an aspect of their syntactic behaviour which strongly suggests that they may also be analysed as NP-complements- as well as Relative clauses. But when one realises that this possibility of two-fold analysis is restricted to certain categories of verbs, namely, Emotive and Epistemic verbs, then the conclusion becomes inescapable that this uniqueness is due, not to otho-headed NP's, but to the matrix verbs involved. It is thus understandable why only Emotive and Epistemic Verbs permit the infinitivization of otho-headed NP, eventhough most, if not all, verbs do take them as subject or object NP.

6.5 Ma₂ - Complement Verbs

The following is a sample list of verbs which take Ma₂ Interrogative Complements, they all share the following core of features:

+ Verb + S~ Interrog. - Factive + Object \bar{S} Prepose

$\left\{ \begin{array}{l} \acute{i}c\acute{e} \\ \acute{i}r\acute{o} \end{array} \right\}$

to think

$\acute{i}ka$

to say

$\acute{i}gb\bar{a}$ $\acute{a}g\ddot{y}g\acute{o}$

to argue, debate, doubt

$\acute{i}j\ddot{u}$

to ask

ítūle		to examine, reason out, figure out
ílē	anya	
ítū	anya	to expect
ínā	nthi`	to make out

In addition to the above, most Na` - Complement Verbs take Ma` Interrogative Complements whenever such verbs are in the Negative or Imperative form.

Chapter 7

Si' Imperative Complementation.7.0.0 Introduction

This chapter is very short, being concerned with the smallest of the categories of NP-Complements in Igbo - the Imperative Complement which is introduced by the complementizer morpheme si'. The status of this complementizer has been fully discussed in chapter 4 (4.1.5) where it has been made clear that this specialised function of si' is due to the fact that it is a form of the verb isi 'to say' which can introduce the actual words of the speaker as if in quotes.

In this chapter, we high-light the similarities and differences between the Imperative complements on the one hand, and Na Declarative Complements on the other. We do this because both complement types draw from the same sub-category of verbs for their matrix predicates: specifically only verbs of saying, which are also Na-complement - taking verbs, can function in the matrix sentences of si' Imperative complements. One of these differences lies in the fact that it is only in si' Imperative complements that we have a rule of Complementizer Deletion which is not triggered either by Equi-NP Deletion, as in Subjunctive Complementation (cf 8.2.0), or by Agent Deletion under Conditions of indefiniteness, as in Interrogative complementation, (cf 6.4:366-7). The conditions governing this optional deletion of si' complementizer are given in 7.2.0. Secondly, from the account presented here, it will be observed that the particular sequence of rules that one decides to apply determines whether the rule of co-referential NP Deletion is optional or obligatory. For example, the following sequence of rule applications,

- (i) Ya' Deletion
- (ii) Comp. Deletion

(iii) Consecutive co-referential NP Deletion (oblig.). creates an output to which the rule of co-referential NP Deletion is obligatory (cf 7.2.0. p.392), while the alternative sequence,

- i) Ya' Movement
- ii) Pseudo-cleft
- iii) Relativization (oblig.)

produces a derived structure which does not meet the structural description for obligatory co-referential NP Deletion because the two co-referential NP's are no longer consecutive, but separated by the copula wú, (cf 7.2.0. p.392). This situation is unique to si Imperative complementation.

Finally, in terms of the range of phenomena examined in this chapter, the analysis of Imperatives in Igbo is of a wider scope than an analysis of equivalent constructions in English and, expectedly different. We recognise the following constructions which are used in giving commands:

- (a) Imperatives, and
- (b) Peremptory Declaratives

But we are only concerned with Imperatives, and for that matter with only a sub-category of Imperatives because only this sub-category has imperative verb-forms in both the Affirmative and Negative. The other sub-category with the modal, ga, (Ga - Imperative) although an imperative construction of a kind, behaves like Peremptory Declaratives in the Negative and under NP-complementation. These categories of construction - Imperatives and Peremptory Declaratives are discussed in the following section 7.1.0.

7.1.0 Igbo Imperatives and the Range of Phenomena Examined

Since we are going to be concerned in the rest of this chapter with Imperatives, but not with Peremptory Declaratives, we shall start with the latter so as to dispose of them and concentrate on the relevant subject.

Consider the following as examples of what we describe as Peremptory Declaratives; (the term is due to Stockwell et al (1973: 649 et seq)).

1(a) Í nūfùta ógwī ò gbúò. (vb íñū cl.1)

You drink must medicine this now: You must drink this medicine now.

(b) Ányí jhéfùta áhya tháa. (vb íjhē cl.3)

We go must market today: We must go to market today.

(c) { Ógu { záfùta } ala ńlō ò gbúò. (vb iza cl.2)
 ń

Ogu/he must sweep this floor now.

Observe from 1(a-c) that the verb-form involved in this type of construction is fixed: it is always the verb-stem plus the following compound suffix -fùta. Because this suffix is on low-tones, the preceding verb-stem is uniformly high regardless of the class of verb involved. The compound suffix -fùta corresponds to the English modal 'must' which occurs only with Peremptory Declaratives, but never with Imperatives. We employ the term, Peremptory Declaratives, to denote a construction type in Igbo with the type of verb-form described here. This construction type is used to perform the speech act of giving commands and issuing orders. In other words, the illocutionary¹ force of Peremptory Declaratives is an order or command. As we shall demonstrate very shortly, the verb-forms involved in 1(a-c) are not imperative verb-forms as we know them in Igbo.

Having pointed out the distinctive characteristic of the above construction type, let us now examine the next category - Imperatives.

1 This term is used here in the sense that J L Austin (1962) and J R Searle (1969) use it.

7.1.1 Imperatives

We also use the above term to denote a construction type with the following sub-members - Imperatives 1 and 2.

Imperative 1 - or Gà - Imperatives

This sub-category of Imperative Constructions is exemplified in the following:

2(a) Nwátàkírì gá erúwere nne nà nnà íshi.

Child will obey mother and father:

A child should obey his father and mother.

(b) Ónye ò wulà ga emé ñwe a gwàra ya'.

Person who it be will do thing one told him:

Everybody should/will do what they are told.

(c) Ọ́ gá eñírìrì ēzhi tupu ya āgawa akwụkwọ .

He must sweep compound before he goes school:

He must (unfailingly) sweep the compound before going to school.

Examples 2(a-c) have the modal, gá, which has been glossed as 'will' or 'should'. In addition, 2(c) has the emphatic verb suffix -rìrì which with ga has been translated as 'must unfailingly'.

Imperative 1 can be likened to Peremptory Declaratives in Igbo since both of them have the illocutionary force of command, and each of them has a fixed verb-form. But it should be remembered that the modal gá is associated only with Imperative constructions and never with Peremptory Declaratives in the English language, and that this situation is similar to what obtains in Igbo.

However, the similarity between the two construction types - Peremptory Declaratives and Ga-Imperative is further brought out by the following examples where verbs are in the Negative:

3(a) Nwátàkírì agāñhii erúwere nne nà nnà íshi.

A child should not obey his mother and father

3(b) Ónye ò wulà ágāhīi èmé hwe a gwàra yá.

Everybody should not do what they are told.

(c) ò gāhīi èhīriri ēzhi tupu ya āgawa akwūkwo.

He must not sweep the compound before going to school.

4(a) Ì gāhīi inūfuta ógwū ò gbúò.

You must not drink this medicine now.

(b) Ànyí agāhīi ijhēfuta áhya tháa.

We must not go to market today.

(c) Ógù ágāhīi izāfuta ala úlò ò gbúò.

Ogu must not sweep this floor now.

3(a-c) represent the Negative version of 2(a-c), while 4(a-c) represent those of 3(a-c). Observe that the negation of both Peremptory Declaratives and Gā-Imperative entails the use of the same modal gā and the negative suffix -hīI/ghI. This suffix which is associated only with the Indicative mood has been given and discussed in 2.3.4. It is distinct from the negative imperative suffix -lA ~ nA also illustrated in the same section. The fact that these two construction types are essentially the same in the Negative means that they need to be distinguished only in the Affirmative.

Now contrast the verb-forms of both Peremptory Declaratives and Gā-Imperative, on the one hand, with those of the following examples of Imperative 2.

Imperative 2

5(a) *Rí

(b) Ríe : eat! (vb. cl.1)

(c) Fú/Fù² : go out (vb cl.2)

2 With verbs of Tone classes 2 & 3, there is the choice of either the high or low tone unsuffixed imperative according to speaker's attitude: The high-tone form is generally abrupt and used only in moments of anger or disgust, when it may be followed, after a pause, by a word of abuse thus Fú - ónye ohī: Get out - rogue!
This high-tone form of verb* classes 2 & 3 imperative never take a suffix in our dialect.

5(d) Ga/Gá : go (vb cl.3)

So far, we have not discovered any class 1 verb whose imperative form is without a suffix in constructions such as 5(b-d). However, the unsuffixed imperative form of this group of verbs is possible, provided there is a following lexical item or phrase, as in 5(e).

5(e) Rí' ngwañgwa: Eat quickly/Be quick with your eating.

6(a) Raa ūbhe: Eat some pears (African pears) (vb. cl.1)

(b) Zaa amā : Sweep the road. (" " 2)

(c) Gaa ozhi : Run the errand. (" " 3)

(d) Hyōchámachaa oce niile.

Dust complete well clean seats all: Dust all the seats thoroughly clean.

(The verb in 6(d) above is a compound one with the following constituents:

íhyō - to dust (cl. 3)

íchā - to be clean (" 1)

ímā - to be neat, clean (" 1)

Compound verbs are as yet unclassified).

Negative Imperative

The above examples have their corresponding negative versions with a distinctive suffix -la, which has also been illustrated in 2.3.4.

7(a) Árāla ubhe : Don't eat pears

(b) Ázāla - ama : Don't sweep the street/road.

(c) Ágāla ozhi : Don't run any errand

(d) Áhyōmachala oce niile: Do not dust all the seats thoroughly clean.

7(a-d) are the negative counterparts of 6(a-d); to these may be added the following 8(a) & (b) in which the phonemic shape of the Neg. Imperative suffix -la is phonologically determined:

8(a) Áñuna maḭ: Don't drink (wine).

(b) Ámuna ížū ohi: Don't learn to steal.

From 7 & 8, it will be observed that the negative imperative

form of the verb is morphologically distinct from other negative suffixes such as -hII/ghI. In other words, the Indicative negative suffix -hII/ghI co-occurs with the verbs of Peremptory Declaratives and Imperative 1, while Imperative 2 verbs take only the -IA suffix whose tone is determined by that of its verb stem.

Admittedly, the affirmative imperative form of Igbo verbs, such as we have given in examples 5 & 6, is not distinct from, say, the Subjunctive or conditional form of the same verb, as the following 9 & 10 show:

- (a) A'cɔrɔ m ka Ógù ríe ħwē .
Want I that Ogu eat thing; I want Ogu
to eat something.
- (b) Ácòrɔ m ka Ógù zàá ògbé.
I want Ogu to sweep the parlour.
- (c) Ógù na agbólì ka únu gáa n'og'hè.
Ogu is trying that you go in time: Ogu
is struggling to see that you go in time.
- 10(a) Dì' yā rie ħwē, ya ābyawa.
If husband her eats thing, she starts coming: If her
husband eats, she will start coming.
- (b) Gĩ' zaa ulò, óbí' adí' m̄ mma .
If you sweep the house, heart will be to me good:
If you sweep the house, I shall be happy.
- (c) Yá' gaa, mu anòdí' n'u'lò'.
If he/she goes, I stay at home:

Examples 9(a-c) are subjunctive constructions, while those of 10(a-c) are Conditional ones. The relevant verbs have been underlined. A look at them reveals that, apart from gáa in 9(c) and 10(c), the other verbs are neither morphologically nor tonally distinct from their

imperative form in 5 & 6. This might tempt one into an analysis which recognises a general Subjunctive Mood for Igbo verbs, which may be used either to give orders or make requests. This is the situation in English and other Indo-European languages where the Imperative and the Subjunctive are not as clear-cut as they are, say, in Latin, where the following distinct forms exist side by side:

Veni	(Imperative)	come	(sg.)	
Venite	"	come	(pl.)	plural
and				
Venias	(Subjunctive)	you	(sg.)	may come.
Veniatis	"	you	(pl.)	" "

But the existence of the distinct Neg. Imperative suffix -*la* argues against such an analysis.

Moreover, there are syntactic distinctions, too, which support the recognition of a separate Imperative mood of the verb. We have seen, for example, that Tone class 3 verbs, igā for example, have two distinct tone patterns -

gǎǎ	for the Imperative and
gáá	" " Subjunctive & Conditional.

Although verbs of this Tone class could be seen as exceptions to the rule, their tonal distinction in the two types of constructions being considered here - Imperatives on the one hand, and the Subjunctive and Conditionals on the other, is to be recognised. Secondly, Peremptory Declaratives and Gǎ-Imperative constructions behave differently from Imperative 2 under NP embedding: Whereas Imperative 2 can be introduced only by si' complementizer - the sole marker of Imperative complements, Peremptory Declaratives as well as Imperative 1 may be introduced by either Na or si' complementizer. In the case of Peremptory Declaratives, Imperative NP-embedding results in a change of pronoun subjects from the non-emphatic to the emphatic forms, thus:

- 11(a) 0' kara sí { am
(b) 0' kara sí { agi
(c) 0' kara sí { aya } jhéfùta áhya.
- He said that { I
you
he } must go to market

But with Nà as the complementizer, the above change in pronoun forms does not obtain, as 11(d) shows:

- (d) 0' kara na m' jhéfùta áhya: He said that I must go to market.

The fact that Peremptory Declaratives and Ga-Imperatives can be introduced by either sí or Nà means that they belong to the other categories of complements, rather than to sí Imperative complement. Thirdly, although in the Affirmative, Subjunctive and Conditional verb-forms are not distinct from the Imperative one, in the Negative there is a sharp distinction, as the following examples reveal:

- 12(a) 0' kwùru sí anyi anwùna
He said that we die not: He wished us well/
He wished us a long life.
- (b) 0' gwàra h' ejhèle:
He told them go not: He asked them not to go.
- (c) 0' sí madhù anòna n'éfù.
He said person stay not idle: He said that no one should stay idle.

In the above 12(a-c), the Imperative verb-forms have been underlined; the only permissible complementizer is sí and the matrix verbs are those of saying. But in the following 13(a-b), the underlined verb is a periphrastic verb construction involving the verb íghà and a following nominal complements; furthermore, the verbs involved in the superordinate sentences are not verbs of saying:

- 13(a) Ácòrò m ka ányị ghàrá (nà) ígā ahyà.
Want I that we avoid (from) going market:
I do not want us to go to market.
- (b) Émeghe m ósịịsọ mà ányị ghàrá imē léèthi.
am doing I quickly that we avoid going late:
I am hurrying so that we may not be late.

If the verb-forms in Subjunctive and Conditional constructions were identical to those in Imperative constructions, then one would expect their negative equivalents to be also non-distinct. In other words, one would expect the negative imperative verb-forms in 12(a-c) to have the privilege of occurrence in Constructions such as 13(a-b). That this is not the case accounts for the deviance of the following 13(c-d): imperative verb-forms do not function in subjunctive clauses in Igbo.

- 13(c) * Ányì coro ka ányì anwùna.
We want that we die not
- (d) * Ányì kwádoghe {^{sí}_{ká}} ányì añwùna ñì.
We are preparing that we see not them.

Just as verbs in a Subjunctive or Conditional construction have their appropriate negatives, so do imperative verb-forms, a fact which argues for their analysis as distinct verb-forms, despite their apparent identity in the Affirmative. Henceforth, we shall assume that the recognition of an Imperative division of the verb in Igbo is well-motivated.

So far, the examples we have given consist mainly of second person imperatives. But there is much more to Igbo Imperative Constructions than those examples show. For example, unlike English, Igbo has imperatives for all the three persons both singular and plural thus:

- 14(a) m' gawa' gbuo? (verb iga cl.3)
I go start now? : Should I start going now?

- 14(b) Gáwá gbuò : Start going now.
- (c) Yá gáwá gbuò: Let him start going now
- (e) Ányị gáwá gbuò?: Are we to start going now?
- Únú " gbuò.: Start going now
- Ǻá " " : Let them start going now.
- 15(a) M' nọọ duu? Am to be quiet? (vb. ịnọ cl.2)
- (b) Nọọ duu. Be quiet.
- (c) Yá nọọ duu. Let him be quiet.
- (d) Ányị " " ? Are we to be quiet
- (e) Únú " duu. You, people, be quiet
- (f) Ǻá " " . Let them be quiet
- 16(a) M' rie ńwē ? (vb írí cl.1)
- I eat thing? Am I to eat something?
- (b) Rie ńwē Eat something
- (c) Yá rie ńwē Let him eat something
- (d) Ányị " " ? Are we to eat something?
- (e) Únú " " You, people, eat something
- (f) Ǻá " " Let them eat something.

Paradigm with the verb in the Negative

- 17(a) M' ekwūle okwu? Am I not to talk.
- (b) Ékwūle okwu. Do not talk.
- (c) Yá ekwūle okwu. Let him not talk.
- (d) Ányị " " ? Are we not to talk?
- (e) Únú " okwu. You, people, do not talk
- (f) Ǻá " " Let them not talk.

These examples 14-17 are enough to show that the Imperative form of the verb is not limited to the second person, but extends to all the three persons both singular and plural. The only difference is that with the second person as the subject of the Imperative construction,

Observe also from 14-17 that the first person Imperative construction is in the form of Yes/No question. The full form of the first person Imperative is as follows:

- 18(a) ò wú {^m_{anyi}} fùò?
Is it I/we go out: Am I/Are we to go out?
- (b) ò wú {^m_{anyi}} afùla?: Am I/are we not to go out

The question marker here, ò wú, is optionally deletable, and if it is deleted, the bound morpheme, m (hitherto called the inseparable pronoun) must become the free (or separable) form, mu, whenever a negative imperative verb is involved, hence the form we have in 17(a). With the first person as subject, therefore, an Imperative construction in Igbo has the illocutionary force of request. Stockwell et al.(1973) distinguish between Imperatives and Requests in English, the latter, they associate with Yes/No - Questions. In Igbo, the situation is slightly different: the language has a syntactic construction called the Imperative, which can be used to perform the speech act of making a request or giving commands. If a request, rather than an order, is intended, the language employs, in addition, such items as bíkḥō or káá 'please', as in the following examples:

- 18(c) Bikhō afūla.
Please, go out not: Please, don't go out.

3 Stockwell et. al. (1973: 639 et seq.)

18(d) Bikhō, nwa m̄, mēē h̄we m gwàra gí.

Please my child, do what I told you.

It seems that Igbo is unique in having the imperative in all the persons, with the first person imperative being a sort of request.⁴

Having argued the case for the existence of an imperative division of the verb, and demonstrated the form that an Imperative construction can take in Igbo, let us now add that an interest in this chapter lies with Imperative 2 - that is those construction types with imperative verb-forms, and which can be embedded only as sí NP-complements. The process of sí Imperative complementation is discussed in the following section 7.2.0.

7.2.0 Sí Imperative Complementation

Let us consider the paradigms 19-22 and how each of the members is derived:

19(a) Fáda gwàra únú sí unù šoró okwu yā,
Priest told you saying you follow word his
éšòne omumé yā.

follow not deed his:

The priest told you to follow his words, and not his deeds.

(b) Fáda gwàra únú šoró okwu yā, éšòne omumé yā.
(same as (a))

(c) Hwē fada gwàra únú wú sí unù šoró okwu yā éšòne
òmumé yā: What the priest told you is to follow his words
and not his deeds.

4 We also recognise a Category of Subjunctive constructions which may be described as Let-Imperatives. These begin with the complementizer ka which we associate with káà, 'please' (cf 10.2.0.)

The following are illustrative examples:

Kà ányí laa: May we go: Let's go.

Kà ó rie hwē: May he eat: Let him eat

Kà há kwuo h̄we há byàra: Let them say what they came for.

Our analysis of this type of construction has been sketched in. 4.1.4:197.

19(d) Hwé' fada gwàrà únù wú unù šoró okwu yā,
éšòne omumé yā. (same as (c)).

(e) Hwé' fada gwàrà únù wú šoró okwu ī,
éšòne omumé yā. (same as (c)).

20(a) Ó sī Ogù byawá ngwañgwa.

He told Ogu (to) start coming quickly.

(b) Hwé' o sī Ogù wú ya byàwá ngwañgwa.

What he told Ogu is that he should start coming quickly

Hwé' o sī Ogù wú byàwá ngwañgwa.

What he told Ogu is to start coming quickly.

21(a) Ó tiri mkpu sī Otì na nwíè ya mèzhíe.

He shouted that Oti should be reconciled with his wife.

(b) Hwé' o tiri mkpu yā wū sī Otì na nwíè

What he shouted about is that Oti should be

yā mèzhíe.

reconciled with his wife.

(c) Hwé' o tiri mkpu yā wū Otì na
nwíè ya mèzhíe.

(same as (b)).

22(a) Ónye nkuzhi ēkwuole sī onye ōwulà mechie ọnū.

The teacher has said that everybody should be quiet.

(b) Hwé' onye nkuzhi {kwùrule
ná ēkwuole} wú sī onye ōwulà mechie ọnū.

What the teacher has said is that everybody should be
quiet.

(c) Hwé' onye nkuzhi {kwùrule
ná ēkwuole} wú onye ōwulà mechie ọnū.

We take each of these sets of paradigms in turn beginning with
paradigm 19, the Deep structure of which is represented by Fig. 1 with
non-essential details omitted.

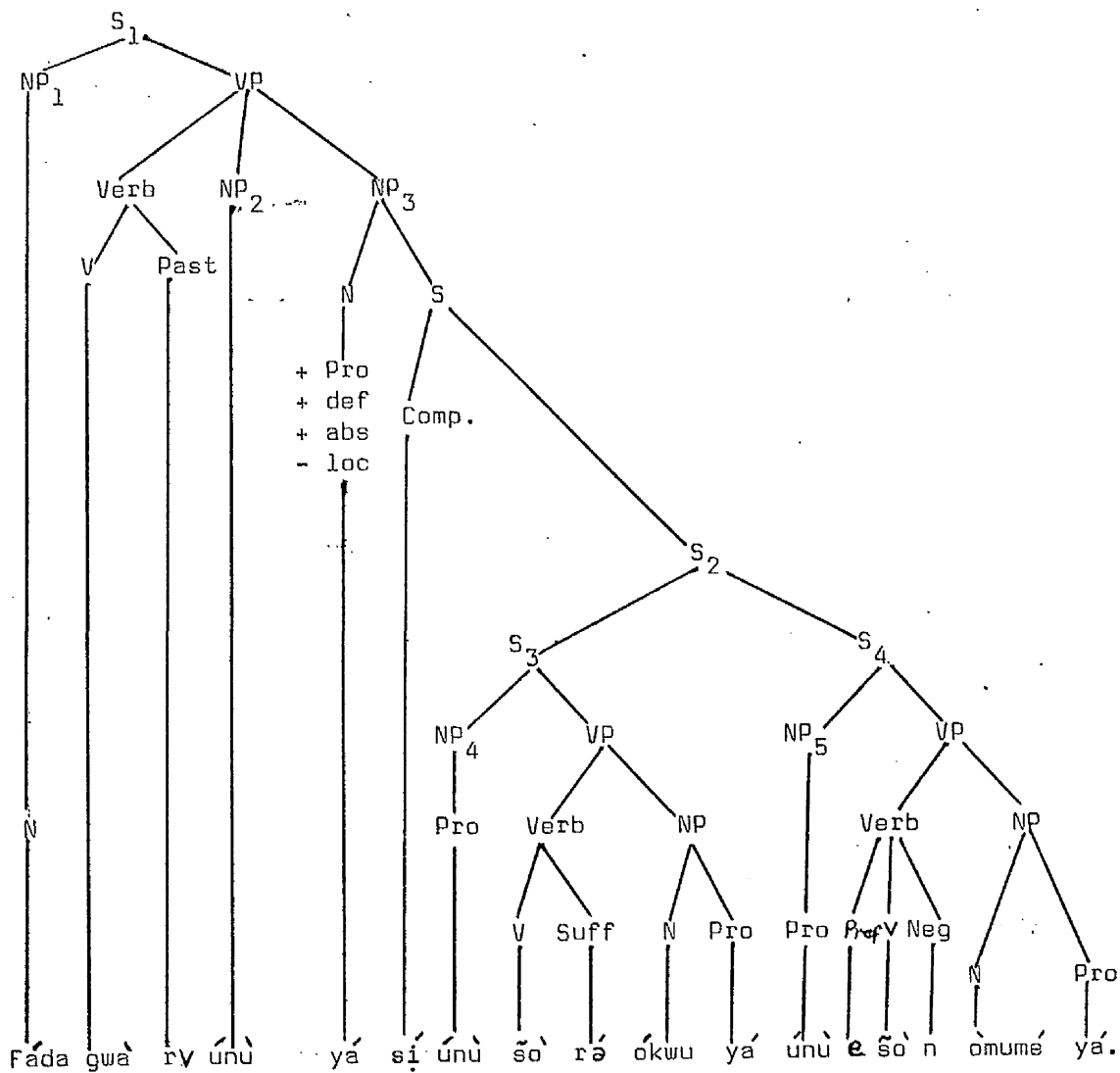


Fig. 1

Let us assume that co-ordinate Reduction and Affix Hopping have applied to Fig. 1 to produce the following 23.

23 Fáda gwàra únú yá sí unú šoró ókwu yá
 éšòne òmumé yá.

23 meets the structural description for either Abstract yá Deletion or Abstract yá Movement: we apply the former first, and the output is 23(a)

23(a) Fáda Gwàrà únú sí unù šoró okwu ya,

ešòne omumé ya. (By T. Abstract Ya Del). With the necessary phonological rules applied, 23(a) becomes the grammatical sentence 23(b), which is the same as 19(a).

23(b) Fáda gwàrà únú sí unù šoró okwu yā,

ešòne omumé yā.

Now 23(b) can undergo the rule of optional complementizer deletion; since this is a new rule, we give it schematically as follows:

The Rule of Comp. Deletion

SD:
$$\left[\begin{array}{c} \left[\begin{array}{c} \text{NP} \\ s_1 \end{array} \right] \text{Verb} \text{NP}_{s_1} \left[\begin{array}{c} \left[\begin{array}{c} \text{Comp} \\ s_2 \end{array} \right] \text{NP} \text{Verb} \text{NP}_{s_2} \end{array} \right] \end{array} \right] \text{X}$$

1 2 3 4 5 6 7 8

Process: Delete 4

Condition: (a) 3 = 5, and 3 is the indirect object.

(b) obligatory iff 2 is the verb *ísi*,
otherwise optional.

X is a variable.

SC: 1 2 3 Ø 5 6 7 8.

The output of this Deletion rule applying optionally here is 23(c), which now becomes the input to the rule of consecutive NP Deletion, the rule is obligatory:

The Rule of Consecutive Co-referential NP Deletion - (oblig.)

23(c) Fáda gwàrà únú únú šoró ya ešòne omumé ya.
SD:
$$\left[\begin{array}{c} \text{NP} \left[\begin{array}{c} \text{Verb} \\ \text{VP} \end{array} \right] \text{NP} \left[\begin{array}{c} \text{NP} \\ \text{VP} \end{array} \right] \left[\begin{array}{c} \text{NP} \\ \text{S} \end{array} \right] \text{VERB} \left[\begin{array}{c} \text{NP} \\ \text{S} \end{array} \right] \end{array} \right] \text{X}$$

1 2 3 4 5 6 7

Process: Delete 4

Condition: 3 = 4

SC: 1 2 3 Ø 5 6 7

The output of this rule is 23(d) in which the necessary phonological rules have been applied.

23(d) Fada gwàra únù šoró okwu yā ešòne omumé yā.

This 23(d) is the same as 19(b).

Observe that this rule which deletes the subject of the embedded *sí* Imperative Complement is obligatory here because the two co-referential nouns follow each other consecutively. Note also that the sequence of the rules so far applied in the derivation of 19(a) and (b) is as follows:

- (1) Ya' Deletion (oblig.)
- (2) Comp. " (opt./oblig according to the matrix verb - cf p.437ff).
- (3) Consecutive Co-ref. NP Deletion (oblig.)

For as long as this sequence is followed, so long with the deletion of the complementizer produce a derived structure in which the two NPs - the matrix object and the Embedded subject - are consecutive. Now let us see how the adoption of an alternative sequence determines the obligatoriness or optionality of this NP deletion.

This time, we start with the alternative rule - the Ya' movement rule on the same structure 23 - repeated here for ease of reference:

23. Fada gwàra únù yá sí unù šoró okwu ya ešòne omume yá.

23(e) Ya' fada gwàra únù sí unù šoró okwu ya ešòne omume yá.

(By opt. Ya' Mvt.)

(f) Hwé' fada gwàra únù wú sí unù šoró okwu ya ešòne omumé ya. (By oblig. Pseudo Cleft)

(g) Hwé' fada gwàra únù wú sí unù šoró okwu ya ešòne omumé ya. (By Vacuous Relat₁)

(h) Hwé' fada gwàra únù wú sí unù šoró okwu yā ešòne omumé yā. (by Phonological rules)

23(h) is a grammatical sentence and is the same as 19(c).

23(h) may now undergo the optional rule of comp. deletion since its matrix verb is not ísí, and the output of the application of this rule is 23(i)

23(i) $\tilde{h}w\acute{e}$ fada gwàrà $\acute{u}n\grave{u}$ $w\acute{u}$ $un\grave{u}$ $\check{s}or\acute{o}$ okwu yā,
 $\acute{e}\check{s}one$ omumé yā.

23(i) is the same as 19(d).

It is observable from 23(i) that the two co-referential NP's - the object of the Matrix sentence, and the subject of the Embedded sentence, the two $\acute{u}n\grave{u}$'s - are no longer consecutive because the rule of Pseudo Cleft has brought about the interposition of $w\acute{u}$ between them. This means that none of the conditions for the obligatory application of the deletion of the embedded subject is met. However, the deletion may still apply optionally to yield 23(j).

23(j) $\tilde{h}w\acute{e}$ fada gwàrà $\acute{u}n\grave{u}$ $w\acute{u}$ $\check{s}or\acute{o}$ okwu yā $\acute{e}\check{s}one$
 omumé yā.

23(j) is the same sentence as 19(e).

It is thus obvious that an obligatory or optional application of co-referential NP deletion depends on the derivational history of the structure in question, that is on the sequence of rules that yields the input to this deletion rule.

Recall the conditions for an obligatory deletion of the complementizer $\acute{s}i$: one of them is that the matrix verb has got to be the verb $\acute{i}\check{s}\acute{i}$ itself, the stem of which is $\acute{s}i$ the complementizer. In the derivation of the paradigm 20(a)-(d), this point is illustrated thus:

24 $Y\acute{a}$ $\acute{s}i$ $Og\grave{u}$ $y\acute{a}$ $\acute{s}i$ $Og\grave{u}$ byawá ngwaṅgwa (Base Form)
 $\begin{bmatrix} + \text{Pro} \\ + \text{def} \\ + \text{pers.} \end{bmatrix}$ $\begin{bmatrix} + \text{Pro} \\ + \text{def} \\ + \text{abs} \end{bmatrix}$

(a) $Y\acute{a}$ $\acute{s}i$ $Og\grave{u}$ $\acute{s}i$ $Og\grave{u}$ byawá ngwaṅgwa. (By oblig. Abstr. $Y\acute{a}$ Del.)

(b) $Y\acute{a}$ $\acute{s}i$ $Og\grave{u}$ $\acute{O}g\grave{u}$ byawá ngwaṅgwa. (By oblig. comp. Del.)
 $\begin{bmatrix} + \text{Pro} \\ + \text{def} \\ + \text{pers} \end{bmatrix}$

(c) $Y\acute{a}$ $\acute{s}i$ $Og\grave{u}$ byawá ngwaṅgwa (By oblig. Consec. Coref. NP Del.)

(d) \acute{O} $\acute{s}i$ $Og\grave{u}$ byawá ngwaṅgwa (By oblig. $Y\acute{a}$ - \acute{O} Conv.)

24(e) 0' sī Ogu' byawá ngwañgwa. (By oblig. Phon. rules)

24(e) is the same sentence as 20(a).

It seems that we had assumed that the deletion of the comp. si' is obligatory with isi' as the matrix verb without proving it. Now let us see the consequences of its non-deletion: 24(b) is the output of the abstract Ya' Deletion. Suppose that the deletion of si' does not take place, then we will be left with 24(b) as the input to the Phonological rule of Ya' - 0 conversion, and this will in turn yield 24(f).

24(f) *0' sī Ogu' si' Ogu' byawá ngwañgwa.

24(f) is decidedly deviant.

One may argue that 24(f) meets the SD for Co-referential NP deletion which is optional in a case such as 24(f), above. Even the application of this rule does not redeem 24(f) because the output of such a rule would be 24(g) which still remains deviant:

24(g) *0' sī Ogu' si' byawá ngwañgwa.

It follows, therefore, that the verb isi' must be marked in the Lexicon for obligatory Complementizer deletion in si' Imperative complementation.

If the complementizer is obligatorily deleted whenever isi' is the matrix predicate, one will expect this characteristic to be maintained even in Pseudo-Cleft transforms. This is, in fact, what happens, as the following derivations show following the alternative Rule order which starts with Ya' movement and subsequent Pseudo-Cleft formation rule.

The Base Form remains 24, which we repeat for the sake of convenience:

24 Ya' sī Ogu' ya' si' Ogu' byawá ngwañgwa (Base)

24(h) $\begin{bmatrix} \text{Ya'} \\ +\text{Pro} \\ +\text{abs} \end{bmatrix} \begin{bmatrix} \text{Ya} \\ +\text{Pro} \\ +\text{pers} \end{bmatrix} \text{si' Ogu' si' Ogu' byawa ngwangwa (By opt. Ya Mvt)}$

(i) hwe' ya si' Ogu' wu' si' Ogu' byawá ngwañgwa.

(by Oblig. Pseudo-Cleft)

(j) hwe' ya si' Ogu' wu' si' Ogu' byawá ngwañgwa

(by Vacuous Relat₁)

Suppose we were to apply the Phonological rules which convert Ya' to 0 to 24(j), the output would be 24(k) which is deviant with the comp. si as yet undeleted:

24(k) *hwe' ɔ si Ogu wu si Ogu byawa' ngwaṅgwa.

(by oblig. Ya' - 0 conversion)

Even if the second occurrence of Ogu becomes pronominalised to give (l), the sentence would still remain deviant.

(l) *hwe' ɔ sī Ogu wu si ya byawa' ngwaṅgwa.

(by Pronominalisation)

But the obligatory deletion of the comp si renders the resultant output grammatical.

(m) hwe' ɔ sī Ogu wu ya byawa' ngwaṅgwa.

(By oblig. Comp. Del)

Observe that 24(m) is the same sentence as 20(b), and is well-formed. This fact means that the deletion of the subject of the embedded sentence under identity with the matrix object is no longer obligatory but optional. If this optional deletion rule is applied to (m), the output is (n), which is the same as 20(c).

24(n) hwe' ɔ sī Ogu wu byawa' ngwaṅgwa.

From the derivational history of paradigm 20 given here, it is conclusive that the matrix verb isī is mutually exclusive with the complementizer sī. The reason is fairly obvious: since the verb and the complementizer have a lot of characteristics in common (cf their feature specifications in the Lexicon) to have the two of them in one and the same sentence is definitely repetitious and is not done by native speakers of this dialect. We have argued in chapter 5 that Igbo function words, complementizers inclusive, are verb-forms, sī is a typical example of such a verb functioning as subordinating conjunction.

One of the conditions which determine Comp. deletion is that there must be two co-referential NP's, the first of which must be the indirect

object. In the paradigms 21 & 22, this condition is not met. Let us see how this fact interacts with the comp. deletion rule. The Base Form of the sentences of 21 is given in 25:

25 Ya' tiri mkpu ya si Oti na⁵ nwie ya' mezhie.

(Base Form)

(a) Ya' tiri mkpu si Oti na nwie ya' mezhie (By oblig. Ya' Del.)

(b) O' tiri mkpu si Oti na nwie ya' mezhie (By oblig. Ya' -
O conversion).

25(b) is the same as 21(a), we needed only two stages to derive it from the Base structure 25.

Observe that the matrix object - 'mkpu' shout - is not co-referential with the Embedded subject - Oti, and the verb in the matrix sentence is 'iti mkpu' 'to raise a shout', but not isi, 'to say'. Therefore none of the conditions for comp. Deletion is met. The application of this rule can only produce an ungrammatical sentence such as 25(c).

25(c) *O' tiri mkpu Oti na nwie ya' mezhie.

But the Pseudo-Cleft transforms of 25(b) are not subject to the same constraint, as the following derivational history shows; the Base form is still 25.

25(d) hwe' ya tiri mkpu ya wu si Oti na nwie ya' mezhie.

(By opt. Pseudo-Cleft)

(e) hwe' ya tiri mkpu ya wu si Oti na nwie ya' mezhie.

(By Vacuous Relat₁).

5 This underlying form shows a Base coordination of NP's. We have not given any attention to Coordination in Igbo, which is irrelevant to Complementation. But a systematic investigation of the process of co-ordination in Igbo is very likely to recognise more than one method. Undoubtedly, some conjoined NP's can be shown to derive from higher order coordinates of sentences in Base structure, as has been convincingly demonstrated by Koutsoudas (1971a) But such an analysis will raise the question as to what to do with Igbo sentences such as:

Mu' na' ya kwuru:

I and he went together: I went with/accompanied him.

For sentences like this, there can be no Base-coordinated sentential source.

25(f) ńwé o tiri mkpu yā wū sị Oti na nwíè yá mèzhíè.

(By oblig. Ya-O conversion - Phon rules)

(g) ńwé o tiri mkpu yā wū Oti na nwíè yá mèzhíè.

(By optional comp. Del)

25(f) and (g) are the same as 21(b) and (c) respectively, and they are all well-formed.

Observe that the Pseudo-Cleft rule in the above example entails a transformationally inserted ńwé contrary to our usual practice of deriving it from the underlying abstract proform ya which is still present in these surface structures 25(f) and (g). In this regard, recall also that in 6.2. (p. 342ff), the same phenomenon was observed with the verb 'ígba àgugo' - to doubt. Each of these two verbs have what we describe as inherent complement, that is the verbs must be cited as 'itĩ mkpu' to shout, 'ígba àgugo' - to argue, debate in order for them to make any sense. The Language is full of verbs like these. For this category of verbs, Pseudo-Clefting entails a transformationally inserted ńwé - thing, and the retention in surface structure of the Deep structure abstract ya as the second⁶ object of the verb. A few more examples will help to drive home this point:

26(a) Ézhiri m yá ozhi sị ya zùtára m any.

Sent I to him message saying he buy for me meat:

I sent word to him to buy some meat for me.

6 We prefer to talk in terms of 1st, 2nd, 3rd objects in Igbo rather than in terms of Direct and Indirect Objects for the simple reason that there is no other formal way of distinguishing between these except in terms of their structural position. Consider the following Igbo sentences, for example:

(i) Ogu nyere m any.

Ogu gave me meat: Ogu gave some meat to me.

(ii) Ogu zutara m ya any.

Ogu bought for me (from) him meat.

Ogu bought some meat for me from him.

From these examples, we see that the order is: Indirect obj., the Ablative - from NP, and Direct object; In Case Grammar: the Dative, the Ablative and the object cases - in that order.

26(b) ħwé m zhìrì yá' ozhi yā wū (sì) ya
 thing I sent him word about it is that he
 zùtára m any.

buy for me meat: What I sent word to him about was to
 buy me some meat.

(c) Á m̄ara iwu sì madhù nííle fùshíá
 One made law saying people all come out
 n'ama n'ùhúru ci.

to the square in the decline of day:

A proclamation has been made that everybody must assemble at
 the (village) square in the evening.

(d) ħwé A m̄ara iwu yā wū (sì) madhù nííle fùshíá
 n'ama n'uhuru ci: What has been proclaimed is that
 everybody must assemble at the square in the evening.

Secondly, observe that the comp. sì is optionally deletable
 in the Pseudo-Cleft transforms, even though its deletion in the
 non-Cleft ones - 21(a) 25(b), 26(a) and (c) is blocked. It seems
 a fairly general rule that, except for those sentences whose matrix
 verb is ísì, all Pseudo-Cleft transforms of sì Imperative Complements
 do permit the optional application of the rule of Comp. Deletion.
 This generalisation may even apply to Sì Complements whose matrix verb
 is ísì. For us, however, the deletion of the comp. is obligatory
 provided the verb of the matrix sentence is ísì itself.

The last of the paradigms, paradigm 22, are, in many respects,
 like those of 21, and their derivational history is similar to that
 of 21:

27 Ónye nkuzhi ekwuole ya sì onye òwúlà mechie ọnu
 (Base Form)

(a) Ónye nkuzhi 'ekwuole sì onye 'owula mechie ọnú
 (By oblig. abstr. Ya' del.)

27(b) Ọnye nkuzhi ẹkwuole si onye ọwụlà mechie ọnū

(By Phon. rules)

27(b) is the same as 22(a), and is well-formed.

(c) Yá onye nkuzhi ekwuole si onye ọwụlà mechie ọnū.

(By opt. Abst. Yá Mvt.).

(d) ẏwe' onye nkuzhi ekwuole wu si onye ọwụlà mechie ọnū.

(By oblig. Pseudo Cleft)

(e) ẏwe' onye nkuzhi $\left\{ \begin{array}{l} \text{na ẹkwuole} \\ \text{kwurule} \end{array} \right\}$ wu si onye ọwụlà
mechie ọnū. (By oblig. Relat₁)

(f) ẏwe' onye nkuzhi $\left\{ \begin{array}{l} \text{na ẹkwuole} \\ \text{kwurule} \end{array} \right\}$ wú si onye ọwụlà
mechie ọnū. (By oblig. Phon rules).

27(f) is an acceptable Igbo sentence, and is the same as 22(b).

(g) ẏwe' onye nkuzhi $\left\{ \begin{array}{l} \text{na ẹkwuole} \\ \text{kwurule} \end{array} \right\}$ wú onye ọwụlà mechie
ọnū. (By opt. Comp. Del.).

27(g) is the output of the optional application of comp.

deletion to a Pseudo-Cleft transform, it is the same as the grammatical sentence 22(c).

From the foregoing exposition, the need for the following rules in Imperative Complementation has been established; the order is not extrinsic.

Either (1) Yá Deletion

OR (2) Yá Movement

If 1, then (3) co-referential NP Deletion - (oblig. if
consecutive, otherwise
opt.)

If 2, then (4) Pseudo-Cleft (oblig.)

(5) Relativization (Relat₁) (oblig.)

- (6) Comp. Deletion (oblig. if si' is matrix verb, otherwise opt.).
- (7) Pronominalisation of embedded subject NP (opt).

7.3.0 Comparison & Contrast

Of these rules, the only unfamiliar ones are 3, 6 & 7.

Rule 7 is a general rule of language independent of NP-complementation, while Rule 3 which deletes the embedded Subject NP when immediately preceded by a co-referential matrix object NP is unique to this category of NP complement.

But Rule 6 - the comp. Deletion rule - needs a bit more comment, for this is the first time that we have come across such a rule in Igbo NP-complementation. It is reasonably accurate to say that comp. Deletion is relevant only to si' Imperative complementation in the Language. Outside this category of NP complements, there is very little, if any, evidence for it. This situation is due to the fact that in the dialect being described here, it is very rare to hear a reported statement without an introductory word linking the main to the subordinate clause - the complementizer morpheme. In the generality of cases, the complementizer most often heard is the all-purpose si' which, as has been made clear throughout chapter 4, can and is very often used in addition to or in place of the Na` Declarative, the ma`₂ Interrogative, and ma`₁ and ka` Purpose (Subjunctive), with it always preceding any of these. But when it functions in its special capacity as the sole marker of Imperative complements, it is deletable under the conditions stated in this chapter.

Concluding Summary

After considering all the possible constructions in Igbo which may, plausibly, contend for analysis as Imperatives, this chapter focuses on those imperative constructions whose verbs are in the imperative form. These are the imperative constructions which can only be embedded as si' - complements. The other categories of constructions - Peremptory Declarative and $G\grave{a}$ - Imperatives have been shown to differ syntactically from Imperatives and have not been analysed any further.

The process of si' Imperative complementation has brought to light the following facts:

- (a) the choice of one sequence of rules creates a derived output structure in which the deletion of the embedded subject NP is obligatory, when it immediately follows and is co-referential with the matrix object NP, while the alternative sequence yields another derived structure in which the same rule is optional because the co-referential NP's are not consecutive.
- (b) the deletion of the comp. si' is obligatory, if the matrix verb is \dot{si} ;
- (c) optional in all Pseudo-Cleft transforms, except those with \dot{si} in the matrix sentence;
- (d) optional in all structures with a matrix indirect object NP (the addressee) which is co-referential with the embedded subject NP;
- (e) blocked, if condition (d) is not met.

Chapter 8

The Subjunctive (Ka\ma) Complements.

8.0.0 Introduction

We use the label, Subjunctive, to describe a construction type in Igbo that is neither Indicative, nor Interrogative, nor Imperative, (cf 4.1.4). Its markers are ka and ma, and when embedded as an NP-Complement¹, (always in object position after a category of verbs to be fully discussed in this chapter) its propositional content is invariably a wish, some effort or determination the realisation of which is open. This construction type has been variously described: Green and Igwe(1963) refer to it as the Subject-Verb Form, Conditional; Swift, Ahaghotu and Ugorji (1962) described it as the Hortative, Ida Ward (1936) does not mention it at all. What matters for our purpose is that all these labels reflect an attempt to characterise a clause type in which:

- (a) all pronoun subjects are on high tones;
- (b) all verb stems are high for classes 1 & 3 verbs, and low for class 2 verbs;
- (c) there is a general presence of a harmonising vowel suffix which is invariably on a high tone.
- (d) the future marker ga does not occur, except with a handful of verbs which take na instead of ka or ma (cf 8.2.0:422). examples 16-22), though the time expressed by the verb of this complement is always future in relation to that expressed by the main clause verb.

1 Ka is also the marker of the following Igbo greetings:

<u>Ka</u>	<u>ci</u>	<u>foo</u>	(Onitsha)	Goodnight
(<u>Ka</u>)	<u>ci</u>	<u>böö</u>	(Owerri)	"
<u>Ka</u>	<u>anyi</u>	<u>böö</u>	<u>ci</u>	(Central Igbo) Goodnight.

Although these greetings appear like independent sentences, they can be shown to be complements to some unexpressed verbs of wishing, thus making the Subjunctive Mood in Igbo a dependent rather than an independent mood, (cf 4.1.4). However, the ma complementizer is restricted to Purpose/Causal Clauses, and never functions in this type of greeting.

These are the distinctive characteristics of the complement type described throughout this thesis as the Subjunctive complement.

In this chapter, we shall show that the applicability of Equi-NP Deletion (Equi) to this category of predicates is a consequence of the semantic characteristics of the class of predicates involved in this complement type. The verbs are examined in detail and the constraints on the applicability of Equi discussed in 8.2.0.

As this is the last chapter on the mechanics of complementation in Igbo, we shall bring together in 8.3.0 all the known sources of the so-called Igbo infinitives and provide some syntactic tests for differentiating between infinitives and nominals, though they have the same phonological shape,

I prefix + CV-stem.

In 8.4.0, we give the two types of complements in Igbo based on their structural position or relation with the main clause verb, and then go on to examine Rosenbaum's distinction between NP and VP complements which seems to depend crucially on the structural position of the complements. The NP-VP distinction is rejected as being untenable in the analysis of Igbo complement constructions.

8.1.0 Ka'mā, Complement Constructions

The following are examples of ka'mā, subjunctive complements in Igbo:

- 1(a) Ógu` cọ́rọ́ ka ụ́mụ́āgboghō gbaara ānyị nkwa`.
 Ogu wants that young girls dance for us dance
 n'Orie
 on Orie market day: Ogu wants the young girls to stage a dance
 for us on Orie market day.
- (b) Ányị` cọ́rọ́ ka ónye ọ̀wụ́la` kpúnye eghu yā ọ̀bhu`
 We want that everybody hold goats his in rope.
 We want everybody to get his goats tethered.

- 2(a) Acora m { ka m' dawa } yā anya
 (b) _____ { idāwa } }

Want I that I merely watch him: I want to
do no more than watch him.

- 3(a) ògbúèhì byàrà $\left\{ \begin{array}{l} \text{khworó} \\ \text{còó} \end{array} \right. \begin{array}{l} \text{mà} \\ \text{ka} \end{array} \right\}$ yá' gara m̄ mirí.

Ogbuehi came wanting/intending that he go for me water:
Ogbuehi came to fetch some water for me.

- (b) ògbúǎhĩ byàrà $\left\{ \begin{array}{c} k\grave{a} \\ m\grave{a} \end{array} \right\}$ yá' gára m̄ mirī .

(same as 3a)

- (c) ògbuēhi byàrà ígàrà m mirí

(same as 3a)

- 4(a) ĩbe' gara áhya { kà ya' } ẓɛta eghu wā̃ .
 (b) { izūta . }

Ibe went to market in order to buy the goat.

- 5(a) Ndhù kpɔɔ m' (òku) $\left\{ \begin{array}{l} kà \\ m\grave{a} \end{array} \right\}$ yá chéère m̄ ekpe .

- (b) Ndhu kporo m oku ichere m ekpe .

Ndhu called me call so that he beg me beg:

Ndhu called me so as to plead with me.

Let us start by discussing sentences 1-2 first. As can be observed, the matrix verb in these two examples is the verb icō 'to want, wish'. Each of these two sentences derives from an underlying structure such as is represented in Fig.1.

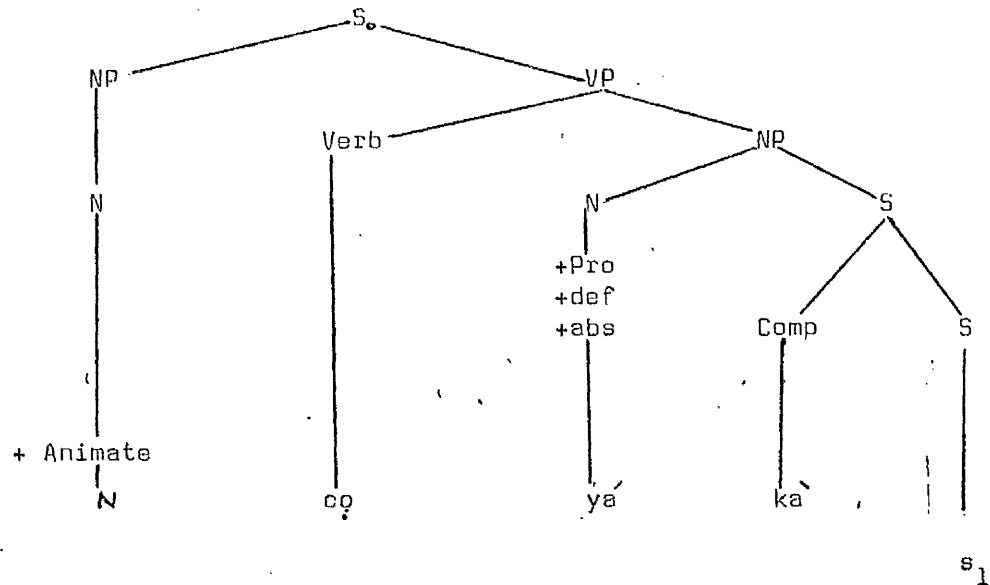


Fig.1

The above structure is like that of any other object NP complement, except for the fact that the main clause subject must be an animate one, that is, some creature capable of purposeful action, and the marker of the complement is *ka* and the matrix predicate is a verb of wish.

Example 1(a) has the following stylistic variants - 6(a & b). In view of the fact that we have given the derivational history of such sentences in 5.1.1, we need not repeat the information here, but assume the application of the relevant rules to the generation of 6(a) & (b) from the underlying Fig.1.

6(a) *Hwé' Ogú còrò wú' ka' ǔmǔāgboghō gbaara ānyị*
 What Ogu wants is for the young girls to dance
 ńkwà' ná' Oriè:

for us on Orie market day.

(b) *Ka' ǔmǔāgboghō gbaara ānyị nkwa' ná' Oriè*
 wú' hwé' Ogú còrò: That the young girls should
 dance for us on Orie market day is what Ogu wants.

The T-rules relevant to the derivation of 6(a & b) -

- (i) Ya' Movement (opt.),
- (ii) Pseudo-Cleft (oblig.),
- (iii) Relat₁ " and
- (iv) Reverse Cleft (opt.)

are among the rules which all categories of NP complements have in common. The T-rule unique to subjunctive complementation - Equi-Deletion - which yields sentences such as 2(b), 3(c) and 4(b) receives full treatment in 8.2.0.

Now let us consider examples 3-5. These sentences are more complex in structure than those of 1-2, as Fig.2 shows. They are instances of Igbo Purpose Construction, the equivalent of English 'so that/in order that' Constructions. It will be observed that the surface, main clause verbs of these complements are non-complement-taking verbs, such as:

- 7(a) byàrà from íbyā - to come
- (b) gàrà from ígā - to go
- (c) kpòrò from íkpō - to call

and a host of other verbs which can be used to express a purposive action. Although none of these is complement-taking, nevertheless they seem, at least superficially, to introduce the subjunctive complement. In order to discover what syntactic evidence there is in support of the analysis of 3-5 as NP-complements, let us examine Fig. 2, the structure underlying such constructions.

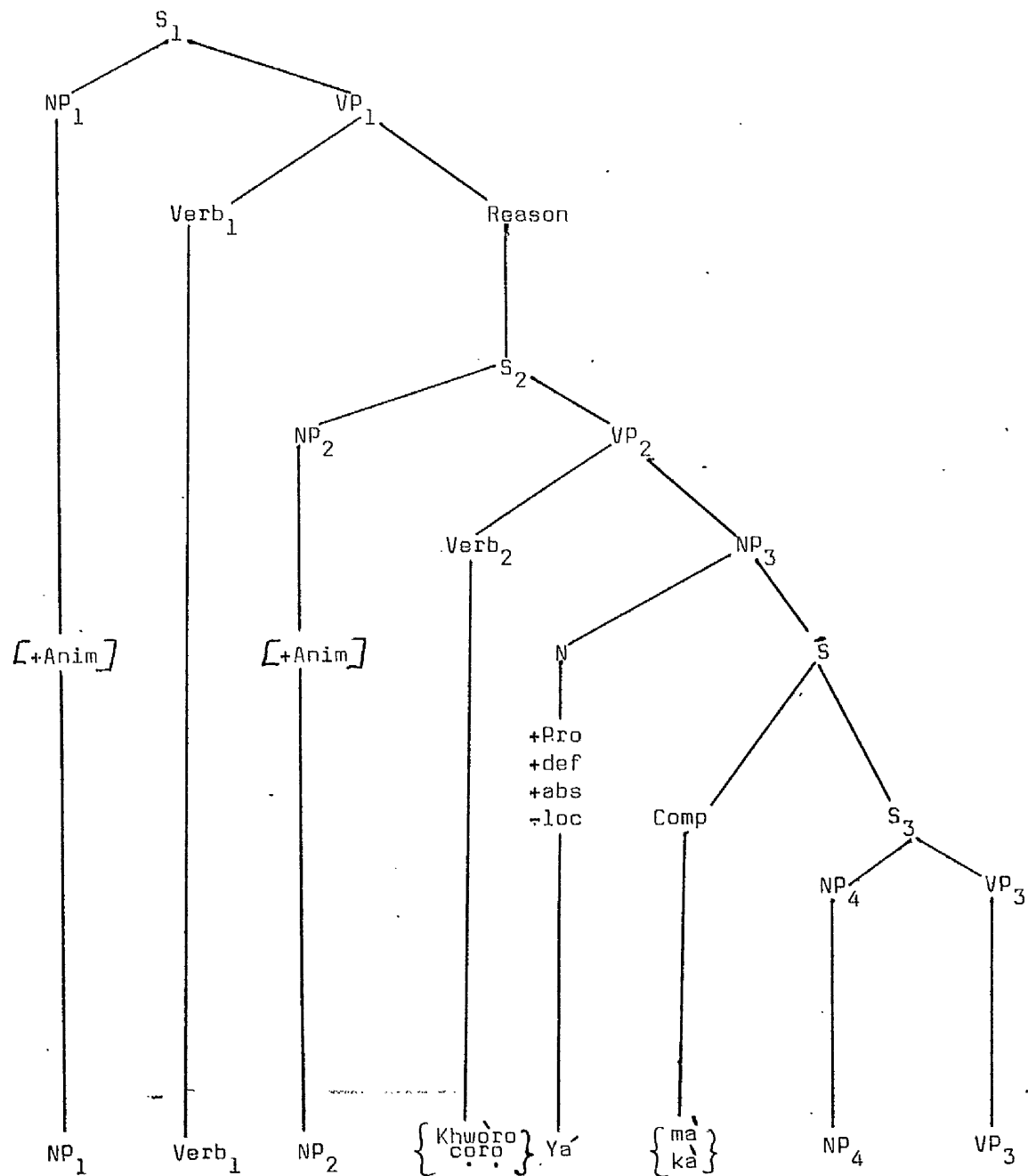


Fig 2.

- (i) $NP_1 = NP_2$,
- (ii) If $NP_1 = NP_4$, then Equi-NP Deletion is optionally applicable.

In order to derive sentences such as 3-5 from the above figure 2, the following stages are necessary: First, NP₂ is deleted under identity with NP₁, thus yielding an output which has the tone pattern of Igbo Narrative constructions² whose second and subsequent verb-forms, like those of Imperative, have their suffixes on a high tone. The output of such a co-referential NP deletion is 3(a) whose structure is shown in Fig.3. 3(a) is repeated here for ease of reference.

3(a) ògbúěhi byàrà { khwòró mà } yá gara m mirĩ
 { còro kà }

2 The fact that Khworó has the tone pattern of a second or subsequent verb in a Narrative construction provides a reason for an alternative analysis of Igbo Purpose Constructions. By this analysis, the structure underlying Purpose constructions in Igbo could be given as a co-ordinate, rather than the subordinate structure given in Fig 2. What Green and Igwe (1963) refer to as the Narrative construction is a form of co-ordination by means of verb serialisation, and this construction does not involve any conjunction whatsoever. Thus, from a deep structure such as

[_{s1} [̀ŋgbúě̃hi byàra] [_{s2} ̀ŋgbúě̃hi khwòro [mà ̀ŋgbúě̃hi gara m mírĩ]]], one can show that co-ordinate deletions yield 3(a), and that the resultant asymmetry between the first conjunct and the subsequent ones is a consequence of such deletions as well as the Optative verb deletion. We have not adopted this method because it involves other principles such as Tree-pruning conventions (cf Ross 1966). But it is not unknown in language for subordination to result from underlying co-ordinate structures. For example; transformational grammarians have argued that the appropriate deep structure of relative clauses is co-ordinate rather than subordinate.

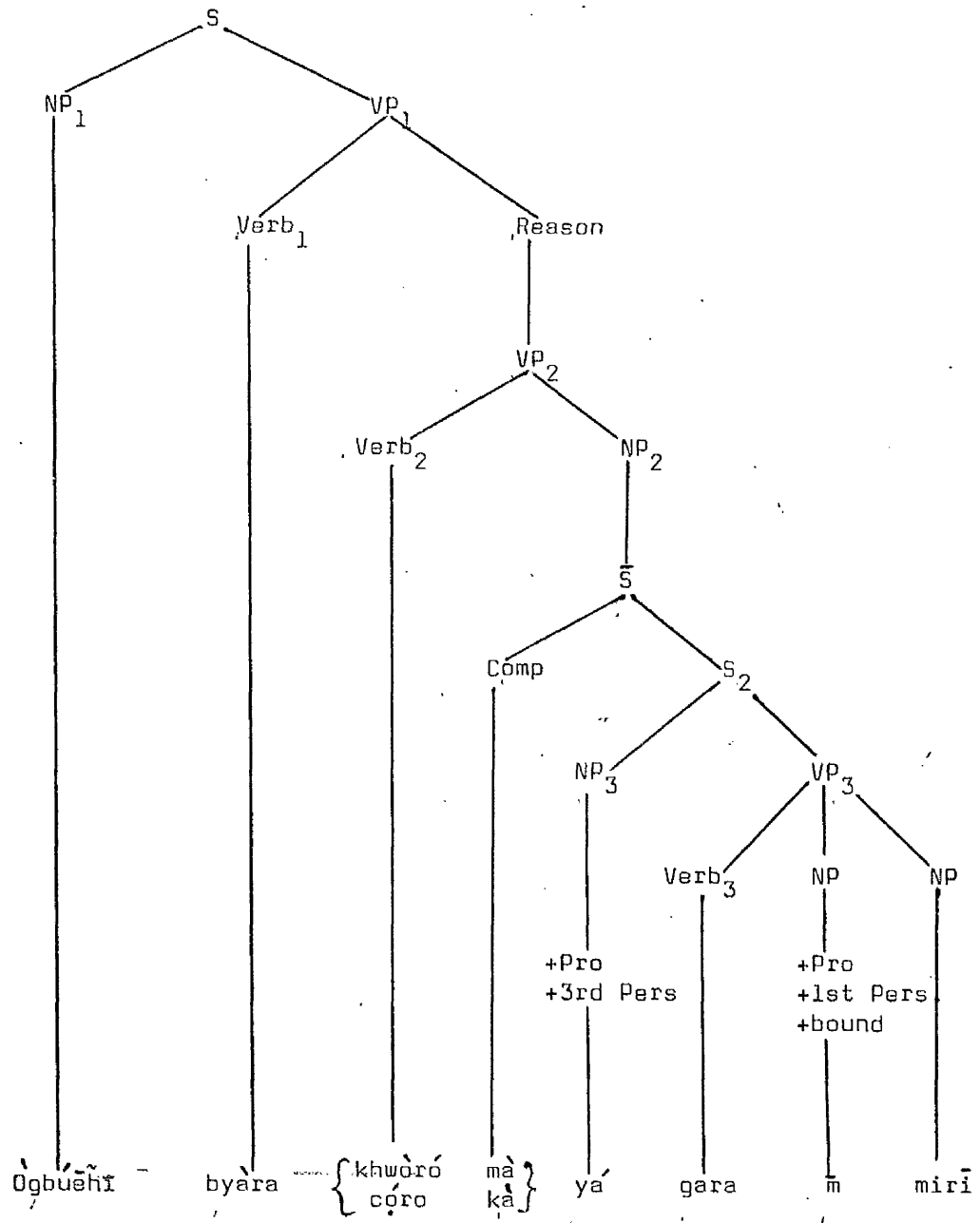
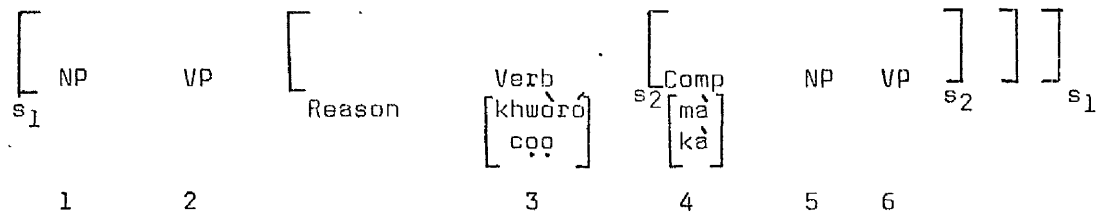


Fig 3.

Now 3a meets the structural description for the optional rule of Optative (Verb) Deletion.

Optative (Verb) Deletion



Process : Delete 3.

Condition : 3 must be preceded and followed by S's.

The output of the above rule is 3(b) which is represented by Fig.4.

3(b) Ògbúèhí byàrà $\left\{ \begin{array}{c} \text{mà} \\ \text{kà} \end{array} \right\}$ yá gara m̄ miri.

Ógbuehi came in order to fetch some water for me.

Observe that it is only after Optative Deletion that the two complementizers kà and mà are in free variation; if this rule is not applied, then the co-occurrence restriction will continue to obtain - that is, icò can only take kà, whereas ikhwò co-occurs with mà in the dialect³ being described here. In other words, these two items can be used interchangeably only in a perfect structure which is the output of Optative Deletion. We shall dwell more on the syntactic similarities and differences between these two optative verbs in §.1.1. What must be emphasized here is that Optative deletion accounts for the surface form of sentences such as 3-5 and a host of similar Purpose constructions in which non-complement-taking predicates appear to introduce subjunctive complements.

3 Rev. Igwe observes (personal communication) that in Òhùhù, the above two complementizers kà & mà are in free variation regardless of which of the two optatives is present in structure. Thus, the co-occurrence restrictions between the two optatives on the one hand, and the complementizers on the other, do not obtain in Òhùhù.

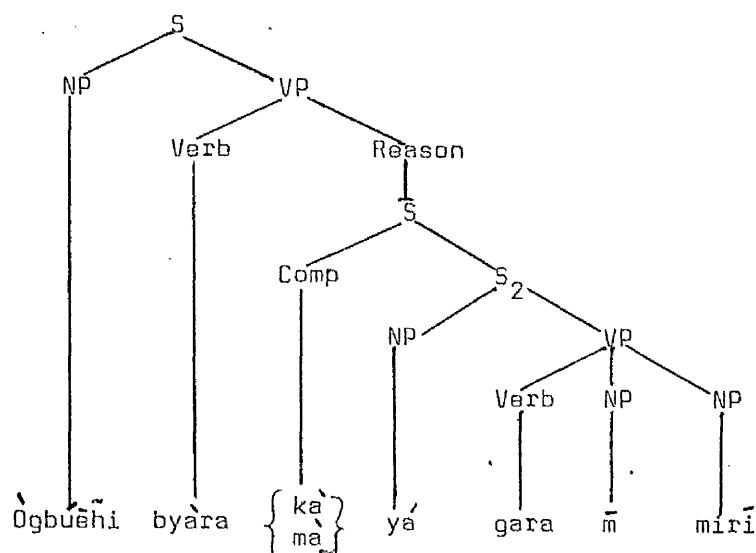


Fig 4.

Note that the applicability of Optative verb Deletion is strictly determined by the structural position of the predicates. Consider the following as further evidence in support of our claim.

8(a) Ogu byara khwòró⁴ mà yá ħwụ m̄.

(b) " " ma yá ħwụ m̄. (by Optative Deletion)

Ogu came in order to see me.

9(a) Ogu khwòrò ma yá ħwụ m̄ bya

" had in mind that he see me come:

Ogu came to see me.

4 Although 8(a) & 9(b) are, to all intents and purposes, synonymous, there are some observable formal differences between them. For example, it is khwòró in 8(a), but khwòrò in 9(b) - that is, two contrasting tone patterns - low-high and low-low respectively. The explanation for this comes from general and well-known facts of Igbo Narrative Constructions in which the verb of the second and subsequent sentences, have their suffixes, if any, always on a high tone, regardless of the preceding tone of its verb-stem. In Narratives, only the first verb bears the tense or aspect marker, while subsequent verbs copy their time from that of this first verb. This fact accounts for the absence of any suffix on bya in 9(a). The verb ikhwò is, however, an exception, since it does not take the open vowel suffix. For this reason, it becomes a bit difficult to distinguish the -rV Time suffix from the -rV non-Time with ikhwò. But the tone pattern of the verb-form provides some clue: if the tone of -rò is in contrast with that of its verb-stem, then, such is the non-Time -rV if it is the same as that of the verb-stem, it is the inflectional -rV Time.

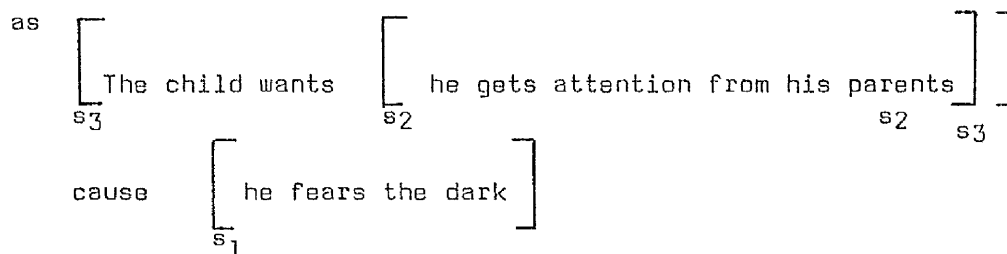
9(b) * Ọ́gu ma yá ńhwu m̄ bya. (by Optative Deletion)

8(b) from which khwòro has been deleted is grammatical because this optative is the verb of the sentence immediately dominated by Reason mode; it is not structure-initial. But 9(b), the output of the same deletion rule is ill-formed because it is the first verb of the construction, it is structure-initial. From 8(a) and 9(b), it is obvious that the Reason clause can be preposed to structure-initial position, and when this is done, the application of optative Verb Deletion is thereby blocked. Thus, the condition for the optional deletion of the optative íco or íkhwo is supported.

The foregoing exposition also demonstrates that Igbo Purpose clauses are subjunctive complements to a two-member class of optatives, and not, as examples 3-5 and others like them suggest from their surface form, to such non-complementizable predicates as those given in 7. Thus, Robin Lakoff's analysis (1968: 202) is supported by facts from Igbo. But there is this minor difference: while she argues that the structure underlying English Purpose clauses includes an abstract verb of wanting and the abstract verb cause, which takes a sentential subject and a sentential object, we have demonstrated that the situation is a bit different in Igbo only in this sense that the verbs in question are not abstract in Robin Lakoff's⁵ sense. They are real and existing verbs of the Igbo language which are only optionally deleted from surface structures given a definite structural position which has been clearly defined above. While the Deep structure for Igbo Purpose expressions is given as in Fig 2, Lakoff gives the deep structure underlying the following English sentence:

5 Robin Lakoff's concept of abstract verbs is that they have no phonetic shape; they are "verbs with semantic and syntactic properties similar to those found in real verbs of the same semantic class, but with no phonological form" (Robin Lakoff 1968: 160ff).

The child fears the dark in order to get attention from his mother.



Thus, where in surface structure English and other Indo-European languages employ such function words as:

so that	English
in order that/to	
ut and the Subjunctive	Latin
ne	
pour que	French
ne que	

Igbo employs definite predicates that take subjunctive complements.

Let us now examine the syntactic and semantic similarities and differences between these two verbs.

8.1.1. The Optatives - *icō* and *ikhwò*

The structural differences between Figs 1 & 2 suggest some basic differences between the above two verbs. In Fig 1, we have a structure consisting of a main clause followed by a sentential complement as object. In Fig 2, on the other hand, the structure is much more complex, being a Purpose construction which generally consists of three sentential units - a superordinate sentence whose VP is expanded as Verb and Reason, the Reason node being in turn expanded as an S whose verb takes a sentential complement as object. Thus, the *kà/mà* complement is the object, not of the highest sentence, but of the next high sentence immediately

dominated by Reason. From this structure and examples 8 & 9 derived from it, one fact emerges, namely that the optative íkhwò functions only in a Purpose or Causal construction where it always requires a sentential object, whereas íco can function either in a Purpose Construction, or in a simple complement structure such as is shown by Fig. 1. The reason for this unique syntactic behaviour of íkhwò stems from the fact that this verb gives the explanation, cause or reason for the action expressed by the verb of the superordinate sentence, hence such a reason or cause cannot occur in the absence of this superordinate sentence. Examples 3-5, and 8 & 9 clearly demonstrate this fact. The following additional data lend further support to the point being made here:

10(a) I' khwuru ya' mụḡ? (vb íkhwò mụḡ - abuse, swear at)

Did you swear at him?

(b) Éé : Yes.

(c) I' khworo gínĩ? What had you in mind, why?

(d) { khwòró
màka } " why? For what reason?

(e) Ékhwòro m { sí
nà } ó' kùru m ñwé'
Had regard I that he beat me thing:

I did so because he beat me.

10(a) and (b) establish the discourse situation in which the following 10(c)-(e) can be used; the verb íco cannot be used to ask such questions as 10(c) and (d) even given the same conversational setting. From 10(e) it is also obvious that íkhwò is one of those verbs which can take either a mà₁ subjunctive or Nà declarative complement according to the intended meaning; íco, on the other hand, can take only the Kà Subjunctive complement, never the Nà declarative one. The explanation for this syntactic difference is easy: íkhwò being a verb which expresses purpose or reason for an action is capable of expressing the reason for past, present or future action in its complement whereas íco being strictly a verb of 'wish' can only express an unrealised

proposition in its complement, and as a consequence is syntactically restricted to Ka' Subjunctive complement. Apart from these differences, the two verbs are very similar in their syntactic characteristics: both of them take the subjunctive complement and are subject to EQUI. We shall now examine the conditions that determine the application of EQUI to these and other verbs which share the same or similar characteristics.

8.2.0 SUBJUNCTIVE COMPLEMENTS AND EQUI-NP DELETION (EQUI)

We have pointed out at the beginning of this chapter that apart from other distinctions, the subjunctive complements are the only complement type which are subject to the rule of co-referential Noun phrase deletion which triggers infinitivization in Igbo. It has further been observed (cf 6.4.) that Igbo infinitival complements are not deep structure forms but transforms of basic ma_2 sentential complement to Emotive verbs; in this section we shall show that it is also the case that object infinitival complements derive from the basic ka/ma subjunctive complements and a few Na complements that meet the essential requirement for EQUI, and subsequently, for infinitivization. What then, are the requirements which subjunctive complements meet but other categories of NP complements fail to satisfy? We begin the answer to the above question by examining the following 11-22 sentences.

- 11(a) Íbè còrò { ka yá wuru } onye ishi ocē
 (b) - { ihwū }
 Ibe wants to be the chairman.
- 12(a) Únú abyála (khwóró) mà únu ñwú dọkítà
 (b) " " ihwū dọkítà .
 You have come to see the doctor.

13(a) Ónū ná akwádo kà yá gaa ahyā

(b) _____ ígā ahya

Onu is getting ready/preparing to go market.

14(a) Ányí gbálìchara ka ányí kpemaa ñā

_____ íkpēma ñā.

We struggled to reconcile them.

15(a) Ógù aháfùlā́ ígā ahya

Ogu has stopped going to market: Ogu has given up trading.

(b) Dí yā ākwùshila yā (ířù) ọrù

Her husband has stopped her from working.

(c) Ọ gbāghàara íshi ñwe ānyāšù

He/she omitted to cook food of evening: He/she failed to prepare the evening meal.

(d) Bíkḥō, aghakwala (nà) ímē ñwe m gwàra gí.

Please, do not omit from doing thing I told you:

Please, don't fail to do what I asked you.

16(a) Ọ́ jūla ná yá gā ejhère m ahya

(b) Ọ́ jūla íjhère m ahya.

He has refused to go for me market: She has refused to go to the market for me.

17(a) Ọ́ kwēle ná yá gā alú Eg'ō.

_____ ịlū Eg'ō

He has consented to marry Eg'o

18(a) Ọ́ kwēle nkwa ná yá gā ejhé

(b) _____ íjhē

He has promised to go.

19(a) Á dūrù m íshi ná ágà m ekwú ezhi-okwū

(b) _____ ikwū ezhi-okwū

I swore to speak the truth.

20(a) Dì' yā bhāra mbha nà yá' gá' egbú yā.

(b) _____ igbū ya.

Her husband threatened to kill her

21(a) Écēfūru m nà ágaara m agwa' yā.

I forgot that I should have told him.

(b) Écēfūru m ígwā ya.

I forgot to tell him.

22(a) Cèté kwe nà í' gá' ejhé' nkū.

(b) _____ ijhē nkū.

Remember {that you should fetch
to fetch} some firewood.

Apart from 15 which has only the infinitival complements, each of the examples 11-22 have either the *kà/mà* or the *Nà* complements in the (a) as well as their infinitival counterparts in the (b) sentences. We represent the rule which deletes the subordinate subject NP under identity with the main clause subject NP as follows:

EQUI-NP DELETION - (EQUI) RULE: (optional)

SD: $\left[\begin{array}{cccccc} \text{NP} & \text{VERB} & \text{VERB} & \text{COMP} & \text{NP} & \text{VP} \\ \text{s} & & \text{s} & & & \text{s} \end{array} \right]$

1 2 3 4 5 6

Process: Delete 5

Condition: (i) 5 = 1

(ii) Either there is 3, or 2 must be a forward-looking predicate.

SC: 1 2 3 4 ∅ 6

The output is 23(a) which is not well-formed until the new subjectless verb has been infinitivized and the complementizer deleted:

23(a) Ányí byara {khwòró mā
còp kà} hū' unū.

The application of the rule of Infinitivization and complementizer deletion to 23(a) yields the well-formed 23(b):

23(b) Anyì byara {khwàró} ìhṵwū unù
 coo

We came for the purpose of seeing you.

In its present form 23(b) meets the structural description for the optional rule of Optative Predicate deletion (discussed on pages 453ff), which, when applied, yields the well-formed 23(c).

(e) Anyi byara ihwū unū .

We came to see you.

Observe that this optional rule is independent of EQUI., Infinitivization and Complementizer deletion rules which we shall henceforth refer to as Equi-NP Triple since all the three need to apply if the output is to be well-formed.

Let us now try to answer the question raised at the beginning of this section, namely, the requirements that need be met before EQUI can apply. From 11-22 it will be observed that all the verbs involved in the main clauses are such as express an unrealised proposition in their complement, the only exception being 15(a)-(d). This is the semantic characteristic of all the subcategories of predicates which are subject to the EQUI-NP triple. For example, the main clause verbs in 11-14 are verbs which express desire, hope, expectation, efforts or determination, while 16-22 reveal a heterogeneous class of verbs which have one thing in common: the fact that the verbs of their complements express a future time in relation to the time expressed by the main clause verbs. It follows from this that the occurrence or non-occurrence of the proposition expressed in these complements must be left open,⁶ and this

6 There are some exceptions to the above assertion in view of the
existence of such verbs as ice - to hope

idū ishi - to swear

These are verbs which can take either Nà Indicative or kà/mà subjunctive complement. Whenever they take a subjunctive complement, the proposition of such a complement is always open. In this sense, they are among the forward-looking predicates in Iqbo.

accounts for the fact that it cannot be past in relation to the meaning of the main clause verb. For example, we cannot wish for (*icō*) something if it has already happened, nor can we swear or threaten (*idū ishi/ibhā mbha*) to do something nor refuse (*ijū*) it if the occasion for doing it is already come and gone.

What these verbs have in common can be informally expressed by referring to all of them as "forward-looking" predicates, a term used by Karin Aijmer (1972) and Bonney (1974). By this descriptive label we mean that the predicates which permit the Equi-NP triple to apply to their complements impose a sequence of tense constraint on the structures in which they occur, an observation which Boadi (1972) had made with regard to sentential complementation in Akan, one of the languages of Ghana. In sentences such as 11-22, there is a dependency relationship between the main and subordinate clauses which does not obtain between the main and subordinate clauses of other categories of NP-complement in Igbo. It is this dependency which explains the tense constraint on the complement verbs - the fact that the time expressed in the complement is always future with respect to that expressed in the main clause. EQUI is sensitive to these semantic characteristics, and this explains the fact that only verbs which meet these conditions can have infinitives as complements. It becomes, therefore, understandable that the subjunctive complements constitute a prolific source of Igbo infinitives via the operation of the Equi-NP-triplet. Recall now that in .2.0:314 - 316 we pointed out that infinitivization in Emotive predicate complementation is also sensitive to this same requirement - that the time expressed by the complement verb be future/present, never past with respect to the that of the main clause verb, and secondly, that the main clause verb be emotive. We can now reconcile these conditions and those that determine the applicability of EQUI here thus:

The verbs which are subject to EQUI are inherently forward-looking, in other words, the conditions being described are part and parcel of their semantic and syntactic features. But the predicates examined in 5.2.0 in connection with Emotive predicate complementation are NOT inherently forward-looking: they do not impose any sequence-of-tense constraints on the verbs of their complements. But in order to infinitivize the verbs of these complements must satisfy the above tense constraint. They do this by taking the antecedent of the Open type of Conditional construction as NP subject.

The tense constraint on the complements of examples 11-14 and 16-22 or the forward-looking character of the main clause verbs involved in these and other such examples constitutes a verb strong common factor to the different semantic classes of verbs involved in subjunctive complementation. It also accounts for the fact that all of them are subject to the optional rule of EQUI.

The different semantic classes of verbs in these examples being examined here express the future meaning of their complement verbs in various forms. For example, Optatives such as íçō and íkhwò and Exercitives such as ígbāli and íkwādo express the future in their complements without the future marker gà. But predicates such as

<u>íjū</u>	to refuse
<u>íkwē</u>	to consent, agree
<u>ídū</u> ishi	to swear an oath
<u>íbhā</u> mbha	to threaten
<u>íkwē</u> nkhwà	to make a promise
<u>íçēfu</u>	to forget
<u>íçète</u>	to remember, recall
<u>íkii</u>	to plan

do take the future marker ga' in their complements, probably because such complements are introduced by the complementizer Na' rather than by ka'/ma'_1 , as 17-22 show. Thus, when their main clause subject NP and the complement subject NP are co-referential, EQUI may apply to yield infinitival complements as 16-22 show. This fact further underscores the primacy of the forward-looking character of these predicates rather than the absence of any claim about the truth or otherwise of the propositional content of their complements. To formulate EQUI so as to be sensitive to this character of the verbs concerned here is to explain its applicability not only to ka'/ma'_1 complements but also to examples such as 16-22 where the complementizer is Na' . These examples 16-22, like their ka'/ma'_1 counterparts in 11-14, express the agent's wish or resolve or determination to do something rather than his view about its truth or falsity.

From all these pieces of evidence, it becomes clear that Equi-NP deletion is by no means idiosyncratic, but regular and easily predictable from the semantic characteristic of complement-taking predicates. If such predicates are forward-looking, and if their main clause and complement clause subject NPs are co-referential, then EQUI and, subsequently Infinitivization and complementizer deletion may apply to their structures to yield infinitives. Bonney (1974) reaches the same conclusion about the English language, and thus challenges the view that EQUI is a lexically governed rule in English, which can be handled by the theory of exceptions as suggested by George Lakoff (1970).

8.2.1 EQUI AND IGBO ASPECTUALS

Before we go on to examine the main clause verbs in examples 15 which we had deliberately left out of the foregoing discussion, let us, first of all, point out that Equi-NP deletion is an optional rule in Igbo - NP complementation, unlike in English where it is obligatory

once the necessary identity condition has been met. For example, like-subject verbs in English are subject to the semantic constraint that their complement must describe something which is within the control of the main clause subject, (Janet Dean Fordor, 1974). for this reason, English verbs such as

try

condescend and

refuse

can occur only in base structures in which main clause and complement clause subjects are co-referential, thus meeting the structural description for EQUI. In cases such as these, EQUI is obligatory, as the deviance of 24(a) and the grammaticality of 24(b) show:

- 24(a) * I { tried
refused
condescended } that I resign
- 24(b) I { tried
refused
condescended } to resign.

The same is true of the Optatives such as

want

desire

like

in the following 25.

- 25 I { would like
want
desire } to resign my appointment.

It is therefore correct to say, with respect to English, that Equi-NP deletion is obligatory whenever its structural description is met, except in very few cases where Equi or Reflexivization may apply as in 'I expect to go/I expect myself to go.

But this is not the case in Igbo, for there exist in the language alternative or variant forms of the Igbo equivalent of the above sentences, thus:

- [illegible]

I am trying/hurrying to catch him before he leaves home.

- [illegible]

Ogu wants to give them some money.

- 28(a) ō dūōla ishī { na' yá gá emé yā } nshi.
 imē ya }

He has sworn to poison him.

It needs to be pointed out, however, that the infinitival versions in (b) are more popular, being shorter.

Although EQUI is an optional rule in Igbo, there is a small semantic class of verbs for which EQUI and Infinitivization seem obligatory. This class consists of the verbs shown in example 15, they are the following verbs which we had deliverately left out of discussion in examining 11-14 and 16-22:

íhāfù	- to leave out, omit, forgive
íghà	- " abandon, omit, forgive
ígbāghà	- " " " "
íkwūshi	- " stop, desist, discontinue.

We have previously described the above verbs as ASPECTUALS - or Operative verbs. These verbs always take the I prefix + V-stem form as their complement, and it is not clear whether this form is an infinitive or a derived nominal of the same phonetic shape as infinitives. Consider the following examples in the light of the above statement:

- 29(a) Ōgu ahāfūla (ikūzhi) nkuzhi
 Ōgu has left teaching: Ōgu has resigned
 from teaching.

29(b) Ug'o akwúshichaala (igbā) ùghala ákwa.

Ugo has completely stopped to trade on cloths:

Ugo has entirely stopped dealing in cloths.

(c) Ághakwala íh̃wū m faa eci.

Do not omit to see me early tomorrow: Don't fail

to see me early tomorrow.

(d) Í gbāghaàra (igā) ozhi m zhiri gí.

You omitted to to go on errand I sent you:

You failed to run the errand I sent you.

29(a)-(d) are representative of the type of constructions associated with this class of verbs. One unique characteristic of these verbs is that they have no corresponding finite complements. This being the case, it is not easy to prove that their complements are infinitives deriving, like those associated with forward-looking predicates, from finite sentential sources. Furthermore, the I prefix + V-stem forms are optional in these and similar examples, and the verbs themselves are not forward-looking, but rather describe "a direct, immediate reaction to a simultaneously occurring or imminent event," as Josephs (1974) points out. It seems, therefore, appropriate to analyse these I-forms as derived nominals or gerunds, or the equivalent of the English -ING nominals as in

Stop singing.

It has {stopped } raining
 {started }

And examples such as the following 30 lend further support to the above analysis:

30(a) Bídho { mēwé } h̃wē m gwàra gí
(b) { imē }

Start (and continue to do) what I asked you:
(the doing/to do)

Start doing what I asked you to do.

Sentences such as 30(a) and (b) in which a verb in the Imperative and the I-form are interchangeable can never be analysed as instances of NP complements in the same way that an analysis of 31 as NP complement in English may find little favour.

31 He { continued
 stopped
 ceased
 went on } talking.

It seems that the verbs involved here as well as their Igbo counterparts are Aspectuals or Operative verbs which require nominals as complement. It is no more than an accident that English formally distinguishes between the Gerund and the Infinitive thus:

Eating (Gerund)
To eat (Infinitive)

whereas for Igbo, there is only one homonym for the above two form classes, that is, the I prefix + V stem form, in this case

íri ñwe.

An alternative approach is to analyse the type of sentences being considered here as having infinitival complements deriving from a deep sentential source which never shows up at the surface. Such an analysis would constitute this class of verbs into an idiosyncratic group for which EQUI is obligatory, as well as the only class of verbs without any empirically verifiable sentential source. Since the odds are so much against this alternative analysis, it is, therefore, rejected in favour of the first approach which, while describing the data accurately, makes possible the general statement that EQUI is an optional rule in Igbo complementation.

8.2.2 EQUI AND NEGATIVE PURPOSE CONSTRUCTION

As a general rule, the Negative verb suffix -ghI never functions in the verb of the complement clause in Subjunctive and Purpose

constructions. This constraint accounts for the grammaticality of 32 and 33 and the deviance of 34:

- 32(a) Ànyí́ acōh̃h̃i { kà́ ányí kwukōrō } unū́ ókwu .
 (b) { íkwūkōrō }

We want not that we talk in common to you:

We do not want to be on speaking terms with you.

- 33(a) Ógù ábyāh̃h̃i { kà́ yá́ kpasuo gī́ } iwe .
 (b) { íkpāsu gī́ }

Ogu came not wanting that he provoke your anger:

Ogu did not come to provoke your anger.

- 34(a) *Ógù byara { kà́ yá́ akpāsuñh̃h̃i gī́ } iwe .
 (b) * { íkpāsuñh̃h̃i }

In 34 above, the negative verb suffix is in the embedded verb⁷ and they are ill-formed. Observe also that for as long as the Negative morpheme is suffixed to the higher or main clause verb, EQUI will apply along with Infinitivization and complementizer deletion to produce the well-formed (b) sentences of 32-33. In order to express negation in the complement clause, the language employs the following alternative constructions:

- (a) by the use of the operative/aspectual verb, íghà⁸ and its nominal complement,

7 The existence of this restriction on the occurrence of the Negative particle makes one wonder whether Negative transportation in Igbo is from a main clause verb to the subordinate one (NEG-Lowering) or from the verb of the embedded clause to the main clause one (thus NEG-Raising). It seems that the occurrence of the Neg-particle in the higher sentence is the norm in Igbo, hence it is more appropriate to talk of Neg-Lowering rather than Neg-Raising, which some verbs permit, but others do not.

8 The verb íghà has been fully discussed along with other Aspectuals, which have been shown to take nominals rather than infinitives as complement. The optional presence of the preposition ná in these examples lends further support to our analysis of the I prefix + v-stem form as nominal rather than verbal.

- (b) by the use of a unique construction in which the verb form is always on low tones, and the complement pronoun third person subject on a falling glide.

The first type is illustrated by examples 35, and the second by 36:

- 35(a) Anyi lawara ma únu ghàrá (nà) íh̃w̃ anyi .

We departed so that you omit from seeing us:

We left so that you might not see us.

- (b) Nwá aḥi' ḥéturu (kworó) mà yá ghará (nà) íkwèrè unù.

Child that hid intending that he omit from greeting you:

That child hid so as to avoid greeting you.

- 36(a) Wèré nwayòò (khworó mà) Ndidí èthetè .

- (b) _____ $\hat{0}$ tête.

Take gentleness regarding that Nddi/she not wake:

Take time lest Ndidi/she should wake.

- (c) Nnē dhōwəɾə iŋi Ogū àgbara ɔ́nu gawa ahyā.

Mother left food lest Ogu starve and go market:

Mother left some food lest Ogu should go to market without eating.

- (d) Ibè gùshiri akwukwo ikhe ya àdha ulé.

Ibe read book hard lest he fail ~~not~~ exam.

He studied hard (lest he should fail) his exam.

so as not to fail

Sentences such as 35 and 36 in which the negative purpose is expressed in the complement clause are not subject to Equi-NP triple which produce Igbo infinitives as output. From these examples, we can state one of the constraints on the applicability of EQUI as follows:

EQUI may apply to a Negative Purpose construction in Igbo if and only if the verb in the negative is the main clause verb and not the

complement clause verb. Secondly, EQUI is blocked in all Negative Purpose clauses which make use of the operative verb, *íghà*, or employs the alternative to the *íghà* construction.

In addition to the above, there are some other constraints which block the application of EQUI even when its structural description is met. What these constraints are will become obvious as we examine the following examples:

37(a) *Ógu` nyere anyí` oce ka` ányí kpòrúlata .*
Ogu gave us seats so that we might sit
down and relax.

(b) **Ógu` nyere anyí` oce ikpòrúlata .*

38(a) *Íbè` núru nshi mà yá nwụọ kwam-kpim.*
Ibe drank some poison so as to die unexpectedly.

(b) **Íbè` núru nshi inwū kwam-kpim.*

39(a) *Ó` rēre àla órū ya ka` yá zụtafuo igwè` .*
He sold his farm land so as to be able to buy a bicycle.

(b) **Ó` rēre àla órū ya izūtafu igwè` .*

40(a) *Nwānyí` à` cughe nwá yā aña mà ó kwụọ ọnū .*
Woman this is giving child her breast so he stop crying!
This woman is breast-feeding her baby so that he might stop crying.

(b) **Nwānyí` à` cughe nwá yā aña ikwū ọnū .*

A look at 37-40 reveals that all the (b) sentences are ill-formed; this is due to the fact that each of the underlined main clause verbs is a transitive verb taking one or two NP objects. Now contrast the foregoing examples with the following 41-43 where the corresponding infinitival complements are well-formed because the main clause verbs are intransitive.

- 41(a) Ọ̀gu byara ka ya' kele unu .
 (b) _____ ikele unu
 Ọ̀gu came so as to greet or welcome you.
- 42(a) Ọ̀nu ihere ka unu dozhie okwu wã?
 (b) _____ idõzhi okwu wã?
 Did you go to resolve the matter?
- 43(a) ́Ndi ọ̀rụ́ lõbhàtara ka ña' rie ñwē.
 (b) _____ írì ñwē.
 The workers returned to eat.

While the presence of a direct object NP before the ka/mã₁ complement affects the grammaticality of the output of the Equi-NP triple, an intervening PP node does not have the same effect.

This fact is illustrated by the following 44-46:

- 44(a) ́Anyị́ gara áhya kà ányị zụta eghū
 (b) _____ ịzụta eghu.
 We went to the market in order to buy a goat.
- 45(a) ́Ecebirí byara n'ishi ụ́tụ́tụ́ ma ya' nyere m aka .
 (b) _____ inyere m aka.
 Ecebiri came very early in the morning in order to help me.
- 46(a) Ọ̀'ọ aláwala n'ụlọ́ ma ya' ñitụ ụ́rā.
 (b) _____ íñitụ ụ́rā .
 Ugo has gone home in order to have a nap.

EQUI must therefore be blocked in all cases where the main clause verb is transitive as otherwise the output of Equi-NP triple will be deviant. It seems, therefore, that applicability of EQUI to Igbo Purpose construction yields the supplementary benefit of helping to distinguish between transitivity and intransitivity in Igbo, especially with respect to those verbs of Movement whose Deep structure prepositional phrase (PP) complement appears in Surface structure as though they were direct

object NPs because they lack the preposition na at the surface.

Apart from the verbs of Movement, the other group of verbs whose status seems clarified by the EQUI test are those verbs with inherent objects, such as

íḍū ishi - to swear an oath
íbhā mbha - to threaten

It is the case that all such verbs which are forward-looking and thus satisfy the essential condition for EQUI do, in fact, undergo this rule once there are two co-referential subject NPs in their main and complement clauses. This class of verbs, cited on page 422 are covered by examples 18-20 which show that their infinitival complements are perfectly grammatical. It follows that such verbs, and Igbo is full of them, may be considered intransitive in spite of their cognate objects. From all this evidence, it is not, therefore, rash to suggest that EQUI as a transformational rule of grammar yields the additional benefit of helping to distinguish transitive from intransitive verbs in Igbo.⁹

Just as EQUI is blocked in the foregoing cases where the main clause verbs are transitive, so it is also blocked in all cases where one of the co-referential NPs is in object relation to the verb as in the following 47-48.

47(a) Ídhy kporo m kà m chéere onye nkuzi ekpe.

Ndhy called me so that I might ask teacher pardon:

Ndhy called me to ask for the teacher's forgiveness.

9 The transitive/intransitive distinction among Igbo verbs is not as immediately obvious in Igbo as it is in English and other Indo-European languages for the simple reason that most Igbo verbs take one type of object or another. For example, we have the following verbs whose citation form must include an object:

Ítū	onye	to	burrow
"	anya	"	expect
"	ashi	"	tell a lie
"	n'anya	"	surprise, be surprising

Some of these can be used transitively and other intransitively. It seems that a three-way classification is called in Igbo: Transitives, Pseudo-Transitives and Intransitives. We have only begun to investigate the matter, (cf Bangboshe 1966: 79-80) for a similar three-way classification.

47(b) *Ndhù kporo m' ichere ónye nkuzi ekpe.

48(a) Ógu na aco' m ka' m lutere ya mai.

Ogu is searching for me so that I might buy him some wine.

(b) *Ógu na aco' m ilūtere ya mai.

In Igbo, Equi-NP triple-EQUI, Infinitivization and Complementizer deletion - produce well-formed sentences, if and only if the two co-referential NPs in the main and complement clauses are both in subject relation to their verbs. It is worth pointing out that the deviance of the above examples can be remedied by the use of the preposition, maka as 49(a) and (b) show:

49(a) Ndhù kporo m' maka ichere ónye nkuzi ekpe.

Ndhù called me for the purpose of asking for pardon from the teacher.

(b) Ógu na aco' m maka ilūtere ya mai.

Ogu is looking for me for the purpose of buying some wine for him.

Although 49(a) and (b) are semantically related to 47 and 48 respectively, we are hesitant to establish such a relationship transformationally. We see the situation as no more than the use of alternative syntactic forms to express one and the same meaning as in the following English sentences:

We have come { in order to ascertain the facts of the case.
with the purpose of ascertaining " " " }

or in the following Latin equivalents:

Venimus { ut vera cognosceremus. }¹⁰
ad vera cognoscenda . }

We have come to find out the truth.

10 The two construction types involved in the above Latin examples are:

(i) ut + the Subjunctive and
(ii) Accusative of the Gerund.

The constraints which block the application of Equi-NP triple in Igbo can be fully appreciated if we examine the various syntactic processes involved in infinitive formation in the language. For example, the infinitive in English can be derived from the following syntactic processes:

- (1) EQUI-NP DELETION (EQUI)
- (2) For ... to complementizer reduction
- (3) RAISING.

Each of these processes can be briefly illustrated as follows:

EQUI:

$$\begin{array}{c} \boxed{\text{John expects}} \\ s_2 \end{array} \quad \begin{array}{c} \boxed{\text{John win the race}} \\ s_1 \end{array} \quad \begin{array}{c} \boxed{\phantom{\text{John win the race}}} \\ s_2 \end{array} \quad \Longrightarrow$$

John expects to win the race.

FOR ... to Reduction

We want for John to leave the room \Longrightarrow

We want John to leave the room.

RAISING

We believe John be honest \Longrightarrow

We believe John to be honest.

The English language is prolific in infinitive constructions.

By contrast, the use of the infinitive in Igbo is much more restricted.

This situation is very relevant in Purpose Clause constructions in both languages. In English, it is perfectly natural and grammatical to hear the following:

50(a) We sold our car (in order) to buy a house.

(b) We gave them money to buy some drinks.

(c) We want him to be present at the meeting.

(d) He worked hard (in order) to attain his position.

The Igbo equivalents of 50(a)-(d) can never have infinitives in their

complement or purpose clauses. The reason is simply this: 50(a)-(d) are the output of a transformational process which is lacking in Igbo - complementizer (for - to) Reduction¹¹ which is obligatory in cases such as 51 to produce 50(a):

51 We sold our car for to buy a house. →

We sold our car to buy a house.

Since sentences such as 50 are the output of obligatory complementizer deletion, and not of EQUI, we cannot expect to have their Igbo equivalents in the infinitive, hence the ungrammaticality of 52(b) which is the output of EQUI on 52(a)

52(a) Ányị̀ rére , motō ānyị̀ kà ányị̀ zuru ụlọ̀ .

We sold our car so that we might buy a house.

(b) *Ányị̀ rére motō ānyị̀ ịzū ụlọ̀

We should recall that EQUI is blocked in Igbo if one of the co-referential NPs is in object relation to its verb. However, 52(c) which is semantically equivalent to 52(a) is well-formed.

(c) Ányị̀ rére motō ānyị̀ maka ịzū ụlọ̀ .

We sold our car for the purpose of buying a house.

For a similar reason, 53(b) is not an acceptable transform of 53(a) in Igbo, although 54(b) which derives from 54(a) via the Raising rule is a well-formed English sentence:

53(a) Ácọrọ̀ m ka Ógù byá .

I want Ogu to come.

(b) *Ácọrọ̀ m Ógù ịbyá .

11 In a recent article, Eckman (1974: 63-82) has argued that Equi-NP deletion "should be viewed as a rule which deletes the second of two identical NPs which are included within the same simple sentence, rather than as a rule of subordinate deletion. Thus Equi-NP Deletion is assumed to apply to the output of Subject Raising" (page 63).

- 54(a) $\left[\begin{array}{c} I \\ s_1 \end{array} \right]$ want $\left[\begin{array}{c} Ogu \\ s_1 \end{array} \right]$ come $\left[\begin{array}{c} \\ s_2 \end{array} \right]$ $\left[\begin{array}{c} \\ s_1 \end{array} \right] \Rightarrow$
- (b) I want Ogu to come

As we have pointed out in 5.2.1., Raising is a minor rule in Igbo limited only to a handful of emotive verbs.

In concluding this section, it is necessary to emphasize the following points about Subjunctive complementation and the applicability of EQUI, and subsequently Infinitivization and Complementizer Deletion:

- (a) only forward-looking predicates are subject to the optional rule of Equi-NP triple, that is, EQUI, Infinitivization and Complementizer deletion. Of these forward-looking predicates, some take $k\grave{a}/m\grave{a}$, and others $N\grave{a}$ complements, but they all undergo the rules of Equi-NP triple once the identity conditions have been met.
- (b) The identity condition is very much restricted in Igbo: it must exist between the main clause subject NP and the complement clause subject NP in order for the output of Equi-NP triple to be well-formed.
- (c) For Negative Purpose constructions to be subject to Equi-NP triple, the negative verb must be the main clause verb. However, EQUI is blocked for those Negative Purpose constructions which make use of the verb, $\acute{i}gh\grave{a}$ or the alternative to the $\acute{i}gh\grave{a}$ Negative Purpose construction.
- (d) EQUI is an optional rule in Igbo, despite the existence of a small semantic class of verbs called ASPECTUALS whose I prefix + V-stem complement has been shown to be nominals rather than infinitives.

8.3.0 SOURCES OF IGBO INFINITIVES

The Igbo Language is full of forms generally and collectively referred to as the Infinitive. These forms begin in a characteristic way - always with a harmonising, high front, vowel prefix I, and the stem of a recognisable verb. It is this similarity of form that gave rise to the name infinitive, regardless of whether the so-called infinitive behaves like a verb or not. The following are illustrative examples of the homonyms which are collectively called the Infinitives in Igbo, the relevant forms are underlined:

- 55 Ácọ̀rọ̀ m ízu anụ
 I want to buy some meat
- 56 Ógù gara íkpa nkhu
 Ogu went to fetch firewood.
- 57 Íkwū ezhi-okwū nà enyé akā .
 To tell truth does help/ is helpful:
 Telling the truth is helpful.
- 58 Íñū okhe māj nà emédhà dímka .
 Drinking too much (wine) degrades a responsible person.
- 59 Ínọ̀ néfù ádíi mma .
 Idleness is not good.
- 60 Énwēre m ikhe { bya .
 { ibya . }
- I have the energy to come; I can come.
- 61(a) Íkhe ifrū orū thaa' ádíhīi m .
 Strength to work work today is not to me:
 I do not have the energy for work to-day.
- (b) Énwēhīi m ikhe (ifrū) orū thaa' .
 I do not have the strength for work today.

- 62 Ígā sùkúùlù na éwùrú ụmū gbuò.
- To go school is the fashion of the present generation.
- Going to school is the fashion for the present generation.

All these underlined forms are phonetically similar. Does this identity of form imply an identity of function?

The answer is an unequivocal no; although these surface forms are identical, there are two syntactic functions involved, each deriving from a distinct syntactic process. The two syntactic functions are:-

- (a) INFINITIVE or (VERBAL) Function and
- (b) NOMINAL/GERUNDIVE "

INFINITIVES

Infinitives are, strictly speaking, verbs. In some Indo-European languages, for example, English and classical Latin, infinitives may have the perfective aspect or be tensed as follows:

- 63(a) I want to talk to him personally. (Present)
- (b) To have ignored such hints from the unions was an open invitation to strike. (Perfective)

Latin

- 64(a) Te exire iubet. (Present)
- You to go away he orders: He orders you to go away.
- 64(b) Ferunt Caesarem ad castra oppugnanda pervenisse (Past)
- They report Caesar to the camp to be stormed to have arrived:
- They report that Caesar has arrived at the camp that needs to be stormed.

But in a language such as Igbo, the infinitive is tenseless or rather expresses no more than future meaning as in 65:

- 65(a) Ácọ́rọ m ígāwa n'og'è.
- I want to set out in time.
- (b) Ányị̀ byara ícō ọrụ
- We came to look for employment.

In other words, infinitives in Igbo are always potential in

meaning, rather than factual, and this is a reflection of the underlying source of such infinitives. For example, the Igbo equivalent of the English sentence 63(b) is the following 65(c) in which only the literal English translation has been given because it makes the point.

65(c) Íkpōchi nthì n'ókhwà nke ndi ọrụ mbara
 Closing ear to the warning which workers gave
 fùtara ígwā ña kwụshi ọrụ .
 amount to telling them stop work.

In 65(c), the form íkṑōchi nthì can only have a (factive) nominal interpretation such as is entailed by its English equivalent 63(b). This point has been argued in 6.1.2: 282-284.

In Igbo, one can distinguish between the following two types of infinitives

- (a) Subjectless Infinitives
- (b) Infinitives with or without Subject.

Igbo Subjectless Infinitives derive from EQUI-NP Deletion applying optionally to the complements of a class of predicates which have been described throughout this chapter as forward-looking predicates. Their structural position is unmistakable: they are always found in object NP position like the object NP sentential complements whose transforms they have been shown to be. In Purpose clauses, however, these infinitives are immediately dominated by Reason node.

We distinguish the above subjectless infinitives from the second category of infinitives which may have their NP subject, such infinitives are associated with ma_2 complements of non-factive emotive predicates, and these have been fully discussed in chapter 5 (5.1.3.)

Like the subjectless infinitives resulting from Equi-NP triple, they are also potential, never factual in interpretation. Their structural position is always subject, and they derive from generalised conditional

clauses functioning as subject NP complements to emotive verbs. These two types of infinitives are therefore in complementary distribution, Subjectless infinitives in object and the other in Subject relation to the verb. The following are a few more illustrative examples of both types; the infinitives are underlined.

SUBJECTLESS INFINITIVES

66(a) Ónye ishī ya ná { acó } icū ya n'gřū.
 { akwádho }

His boss { wants } to sack him from
 { is preparing } his job.

66(b) Ékwēle m̄ nkhwà íkwuchiri ya ugwo .

I have promised to pay for him the debt:

I have promised to pay the bill for him.

INFINITIVES WITH/WITHOUT SUBJECT

67(a) Ókhe mādhy ížū oñi gwūry íkhe .
Old man to steal theft finishes strength:

For an old man to steal is disarming.

(b) Mái igbū nwānyī ádī mma mà ótù ma ótù .
Wine to kill woman is not good at all:

For a woman to get drunk is not good at all.

(c) Ó wū ome - n'alá ānyī wū inyē ndi okhe
It is custom our is to give the old

mādhy nsopurú .

people respect: It is our custom to give respect to our elders.

(d) Íhwū ya anya dī ókhe mkpà .

To see him eye is very important:

It is very important to see him.

8.3.1 NOMINALS/GERUNDS VERSUS INFINITIVES

Our claim is that any I prefix + V-stem form which cannot be related via any of the above syntactic processes which produce the infinitive in Igbo must be a nominal. Nominals of the above form may be due to either lexical derivation or to sentential nominalisation. These nominals behave like some ordinary nouns in Igbo, while infinitives do not. Consider the following examples:

68(a)
$$\left[\begin{array}{c} \text{Na} \text{ } \acute{\text{u}}\text{m}\acute{\text{u}}\text{á}\text{k}\bar{\text{a}} \text{ } \text{nà} \text{ } \text{agá} \text{ } \text{akw}\acute{\text{u}}\text{k}\text{w}\text{o} \end{array} \right] \left[\begin{array}{c} \text{nà} \text{ } \text{enyé} \text{ } \text{obì} \text{ } \text{á}\text{n}\acute{\text{u}}\text{rí} \end{array} \right]$$

NP VP

That the children are attending school gives pleasure.

The fact that children are attending school is a pleasure.

68(b) is transformationally related to 68(a) via nominalisation of the subject Na complement, (cf 5.1.2 for details about the nominalisation of factive complements).

(b)
$$\left[\begin{array}{c} \acute{\text{I}}\text{g}\bar{\text{a}} \text{ } \text{akw}\acute{\text{u}}\text{k}\text{w}\text{o} \text{ } \acute{\text{u}}\text{m}\acute{\text{u}}\text{á}\text{k}\bar{\text{a}} \end{array} \right] \left[\begin{array}{c} \text{nà} \text{ } \text{enyé} \text{ } \text{obì} \text{ } \text{á}\text{n}\acute{\text{u}}\text{rí} \end{array} \right]$$

NP NP VP

The schooling of children gives pleasure.

Observe that iga akwukwo is an NP and that the nominal, umuaka is a genitival relation to it. This noun umuaka can be replaced by any other noun so as to show the tone pattern indicating the syntactic relation thus:

68(c)
$$\acute{\text{I}}\text{g}\bar{\text{a}} \text{ } \text{akw}\acute{\text{u}}\text{k}\text{w}\text{o} \text{ } \text{y}\bar{\text{a}} \text{ } \text{nà} \text{ } \text{enyé} \text{ } \text{obì} \text{ } \text{á}\text{n}\acute{\text{u}}\text{rí}.$$

Schooling of his gives pleasure:

His schooling gives pleasure.

(d)
$$\acute{\text{I}}\text{g}\bar{\text{a}} \text{ } \text{akw}\acute{\text{u}}\text{k}\text{w}\text{o} \text{ } \bar{\text{O}}\text{koro} \text{ } (\bar{\text{O}}\text{kóro})$$

Okoro's schooling

(e)
$$\acute{\text{I}}\text{g}\bar{\text{a}} \text{ } \text{akw}\acute{\text{u}}\text{k}\text{w}\text{o} \text{ } \text{Okoro} \text{ } \text{gàghakwa} \text{ } \text{nà} \text{ } \text{enyé} \text{ } \text{obì} \text{ } \text{á}\text{n}\acute{\text{u}}\text{rí}$$

Schooling which Okoro still schools gives pleasure:

The fact that Okoro still goes to school gives pleasure.

68(d) must be related to 68(e) through an optional Relative Clause reduction. The use of the relative clause in 68(e) is to further definitize the nominal head, ígā akwụkwọ. But infinitives cannot be qualified by the same relative clause, their co-occurrence with infinitives such as those of 66 and 67 produces non-sense combinations of lexical items which can never be described as Igbo sentences. For example, subjectless infinitives cannot be definitized by either a noun in genitival relation with it or by a relative clause, and for infinitives with subjects to be so definitized, one must first of all change the word order. If for example, 67(a) were to be changed to 69(a), then we would be dealing with two different sentences thus:

67(a) Ókhe mādhyé ížū oñi gwürü íkhe.

For an old man to steal would be disarming.

69(a) Ížū oñi okhe mādhyé gwürü íkhe.

The theft of an old man is disarming.

The change of order, therefore, signals a change of grammatical relation and consequently a change of meaning. In its present form, 69(a) can now take relative clauses as 69(b) shows, whereas 67(a) cannot be qualified by a relative clause:

69(b) Ížū oñi okhe mādhyé $\left\{ \begin{array}{l} \text{žūru} \\ \text{nà ežú} \\ \text{gà ežú} \end{array} \right\}$ gwürü íkhe.

Stealing which old man $\left\{ \begin{array}{l} \text{stole} \\ \text{steals} \\ \text{will steal} \end{array} \right\}$ is disarming:

The fact that the old man $\left\{ \begin{array}{l} \text{stole} \\ \text{steals} \\ \text{will steal} \end{array} \right\}$ is disarming.

The order of elements of structure is a key factor in the above interpretations of 67(a) and 69(a). Whenever this order changes, the meaning also changes. But, transformational rules as now formulated are not allowed to effect such radical meaning changes. Therefore, there can be no relationship, transformational or semantic, between 67(a) and 69(a). The above test shows that

- (a) only nominals can be definitized by either an NP in genitival relation with it
or a relative clause
or both,
but never an infinitive since it is part of the complex verb.

The second differentiating test between the two homonyms - infinitives and nominals in Igbo consists in the use of preposition maka; consider the following examples:

70(a) Ányị́ ma na ó ná evú akwà .

We know that he deals in cloth .

(b) Ányị́ ma maka ákwà ó ná evú .

We know about the fact that he deals in cloth .

(c) Ányị́ ma maka { ívū } akwà yá .
 òvuvú } " "

We know about his cloth trade .

Observe that in the nominalised forms in (b) and (c) above, the use of maka is obligatory, and this is normal with ^{some} nominalised Nà complements.

Observe also the use of the variant form of the derived nominal, òvuvú - carrying. If the same preposition were to be used with infinitives, the result would be ungrammatical, as 71(c) shows:

71(a) Ányị́ cogo ka ányị meshie yā ikhe .

We want to deal with him in a tough way .

71(b) Anyi coro imēshi ya ikhe .

We want to deal harshly with him.

(c) * Anyi coro maka imēshi ya ikhe.

We may state the above differentiating test in the form of the following rule:

(b) I prefix + v-stem forms which are nominals but not infinitives may take the preposition, *maka*.

It must, however, be pointed out that some forward-looking predicates (that is, those that are subject to the optional rule of EQUI) do take make before what would otherwise be their infinitive complements, as the following examples demonstrate:

72(a) Ányĩ kwádoghe { kà ányĩ rie } ħwē
 (b) _____ { irĩ } }

We are preparing to eat (something).

73 Anyi kwádoghe màka írì ñhwe .

We are preparing for eating(i.e. for a meal).

But 72 and 73 are neither semantically, nor transformationally related in the sense that 72(a) and (b) are, since the I prefix + v-stem form in 73 must be analysed as a nominal. One can liken 72 and 73 on the one hand to the following English constructions:

74(a) I made a promise { to visit } him in the hospital.
(b) { about visiting }

The above 74(a) and (b) sentences are not semantically equivalent in the same way that 72(b) and 73 are not.

Classical Latin ¹² abounds in such examples where different constructions are employed in the expression of one and the same meaning, as in Purpose or Final Clauses thus:

12 Latin expresses Purpose in either of the following construction types:

- (a) ut and the Subjunctive
- (b) the accusative of the Gerund
- (c) the Supine ending in -um.

75 Venerunt milites ut castra oppugnarent.
 ad " oppugnanda .
 castra oppugnatum.

Came the soldiers { in order to attack
 so as to " } the camp.
 for the purpose of attacking }

The soldiers came to attack the camp.

It is therefore necessary to distinguish between two different form classes in sentences such as 72(b) and 73; in the former we have a clear case of the infinitive and in the latter, an example of the nominal, these two are not morphologically distinguishable in the language, though syntactically they are. Other forward-looking predicates which may take an optional màka are those given on page 22, except íjù (to refuse) and including the optative, ikhwo as in 76.

76(a) Ékhwo m { ma m ñwụ gĩ } bya .
 (b) { íhwụ gĩ }
 (c) { màka íhwụ gĩ }

I had in mind to see you and came:

I came { in order to see } you.
 for the purpose of seeing }

The above 76(a)-(c) have a paraphrase relation, but only 76(a) and (b) are also transformationally related.

We therefore emphasize the two diagnostic tests for distinguishing the nominal and infinitive homonyms in Igbo: Infinitives do not take màka, whereas nominals do. Nominals can be modified by other nominals or a qualifying clause, but infinitives may not be so modified. Infinitives in Igbo are always potential or future in interpretation, while the same homonym functioning as a nominal may be factive, and the sentence in which it is functioning may express past, present or future meaning.

In addition to the foregoing examples, there is also the following type of construction:

- 79(a) Ēnwāre m íkhe bya: I could/might come.
- (b) _____ íbyā: I {can come.
am able to come.}

77(a) and (b) can be shown to be different: 79(a) is the product of Coordinate Deletion of the following instructions:

- 78(a) Énwèrè m íkhè mụ ābya →
(b) Énwèrè m íkhè bya.

I could/may come (but I am not sure)

But 77(b), on the other hand, means that I have the strength/energy
or means to come and no more than that, hence the nominal, *ibyā* (coming).

• Compare 77(b) with 71, for example:

- (a) Ó nwere íkhe ìrũ̃ orũ .
- (b)
- orũ̃.

He has the strength/energy for work: He works hard.

He can work hard.

In the above examples, irū orū and orū must be analysed as nominals in genitival relationship with ikhe.

8.3.2 The ENIGMATIC CASE

Apart from what has been shown to be either infinitives or nominals in the foregoing section, there remain few and isolated cases of the homonym which functions after the auxiliary verbs

igã

ina

Consider the following examples:

- | | | | | |
|-------|---------|---|-------|---------|
| 80(a) | Ágá` | m | ígā | ahya . |
| | | | ngā | ahya . |
| | | | agá | ahyā . |
| | I shall | | go to | market. |

There is a choice of prefixes in the above examples ranging from harmonising vowels to homorganic nasals. If the NP *ahya* is deleted in the above 80, we get the following variants in 81.

- 81(a) Ágà m ígā aga .
 (b) _____ ngā " .
 (c) _____ agá āga .

Observe that what we have in the above examples in place of the deleted NP is a kind of cognate complement. This cognate complement may also be deleted to yield 82.

- 82(a) Ágà m ígā .
 (b) _____ íga¹³ .
 (c) _____ agá .

82(a) is very questionable. It seems that with the above I prefix-form some complement - be it cognate or nominal - is obligatory. If this is true, and there is as yet no evidence to the contrary, then one is in a strong position to determine when an extra dimension of meaning - such as determination definiteness or commitment is involved: the commitment or determination to carry out the action of the verb, *iga* seems to be dependent on the presence of a complement thus:

- 83(a) Ágà m íbyā abyā . I will come (definite)
 (b) _____ abyá ābyā . _____ "
 (c) _____ íbyā abyā . _____ "

13 Rev Igwe observes (personal communication) that there is a meaning difference between sentences such as 82(b) and (c) on the one hand, and 81(a) on the other. Whereas 81(a) is definite and equivalent to first person 'will' in English which, in addition to expressing the future also implies a determination to carry out the action of the verb. (cf 'I will come' with 'I shall come') 82(b) and (c) express no more than the simple future. While accepting this observation, we would like to base the meaning difference on some syntactic facts: the fact in this case being the presence of the cognate complement in which the verb is repeated for emphasis. On the basis of this, 81 and 83 have the same meaning, while 82 has a slightly different meaning. Thus, the semantic interpretation of sentences such as these is predictable from the presence or absence of the cognate complement, which serves to emphasize the verb.

- ? 84(a) Ágà` m íbyā .
 (b) Ágà` m abyá' . I shall come . (not definite)
 (c) " " mbya . " " " . (")

It seems that the choice of the prefix is a dialect issue.

But this explanation does not constitute an answer to the question: What part of speech is it that comes after the auxiliaries ígā and ina? Infinitive it cannot be since it cannot be related to any of the two well known sources of infinitives in Igbo - Equi-NP triple and infinitivization in Emotive predicate complementation. It is not a nominal since it does not behave like one. It seems that auxiliary verbs such as

ígā and
ina

must be seen as verbs whose presence entails the presence of other verb forms which are complement to them. We therefore suggest that verbs such as

gà` agá'
 " ejhé'
 " erí'

et cetera

are not analysable. These verbs are called auxiliaries because they help other verbs to express the right meaning/time. In constructions such as

0' gà` akwú íwu .
 He will pay the fine.

the underlined sequence is the verb which can only be seen as auxiliary plus complement or simply as complex verb form. We do not go along with the previous analysis of the above underlined verb form as auxiliary plus participle. The term, participle, seems ill-motivated in the analysis of Igbo. It will be observed that ina and ígā behave similarly, except that the former does not admit of any other vowel prefix to its complement than the harmonising A thus:

- 85(a) Ana m erí jī: I am eating some yam
 (b) ará opè: " " " " oranges
 (c)* " " irí ji
 (d)* " " ira opè

Conclusion

From the examination of the foregoing examples, one may conclude that (i) there are two form classes of the I-prefix + V-stem shape, or (ii) that there is only one form class which performs two syntactic functions.

The criterial test for each function is this: If the form can take a preposition - na or maka - for example, then it is functioning as a nominal, if not, it is a verbal. If it is verbal in function, it is also potential in meaning or interpretation.

3.4.0 THE NP and VP COMPLEMENT DISTINCTION

Rosenbaum (1967) distinguishes between Subject complements as in 86 and object complements as in 87:

- 86(a) That he came at all is a tribute to his courage.
 (b) It is obvious that he was mistaken.
 (c) For the army to admit their inability to deal with the situation would help matters.
- 87(a) We all know that he could not carry out the assignment.
 (b) Many people wanted to meet him.
 (c) He condescended to be present at such a gathering.

Although Rosenbaum distinguishes complement types by their specific complementizers, just as we do, he does not specify these complementizers in Base structure as we do, but introduces them transformationally.

Robin Lakoff (1968) does the same. For Rosenbaum, all subject complements are NPs, but some object complements are NPs being dominated by a node, NP in the Base, while others are VP complements and are under the direct

dominance of VP in the Base. What are his reasons for this distinction of Object complements into NPs and VPs?

Rosenbaum's distinction is based on the following reason:

all NP complements behave like ordinary NPs under Passive Formation and Pseudo-Cleft, while VP complements do not.

Thus 88(a) the passive form of 87(a), is well-formed, while 88(b) & (c) the passive counterparts of 87(b) and (c) are ungrammatical.

88(a) That he could not carry out his assignment is known by us all.

(b) * To meet him was wanted by many people.

(c) * To be present at such a gathering was condescended to by him.

Similarly, the Pseudo-Cleft transforms of 87(a) is grammatical while those of (b) and (c) are ungrammatical.

89(a) What we all know is that he could not carry out his assignment.

(b) * What many people wanted/^{to}was meet him.

(c) * What he condescended/^{to}was be present at such a gathering.

However, Rosenbaum has retracted from this distinction between NP and VP complements in the following words: ".... the number of clear cases of verb phrase complementation has diminished to the point where their general existence becomes questionable" (Rosenbaum, 1967: IX), and since the distinction itself has been effectively challenged, (cf Loflin (1968), and Wagner (1968), and Bonney (1974), we need not go over the ground again.

Our main concern here is to see whether such a distinction would be well-motivated in the analysis of Igbo; after all it does not follow that a distinction which fails to hold for English will necessarily fail to obtain for the Igbo language, or any other language for that matter. For example, in a study of sentential complementation in Japanese,

Nakua (1973) establishes that such an NP/VP distinction is necessary for an accurate description of this construction type thus:

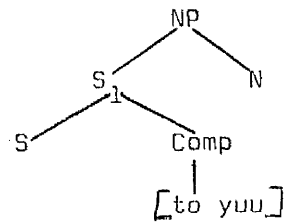


Fig. 5(a)

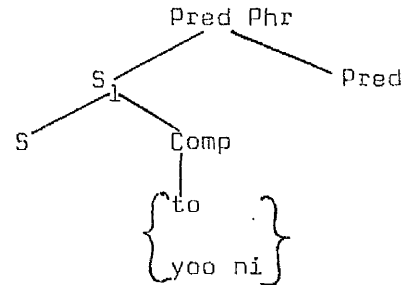
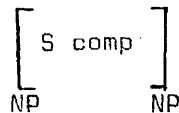


Fig. 5(b)

As in the case of Rosenbaum, the distinction is based on the following reasons:

- (a) in Fig 5(a), the directly dominating node is NP, as opposed to Pred. Phr. in Fig 5(b)
- (b) differences of complementizers: it is 'to yuu' in NP complements, but 'to or yoo ni' in VP complements.

As partial evidence in support of the above distinction, Nakua demonstrates that the T-rules which move or affect simple NPs can also apply to structures such as Fig 5(a), but not 5(b). The fact that such T-rules as Topicalisation, Cleft sentence formation and NP deletion apply to the unit



indicates that it is an NP and that the [S comp] is a Noun complement embedded before a head noun. By contrast, the fact that no part of Fig 5(b) can be moved or deleted by the very same syntactic processes shows that no NP is involved in this structure and that the S comp is a predicate complement embedded before a predicate.

But the situation in Igbo is different. First of all, there is no such thing as the Passive Rule in Igbo, since there are no passive

sentences in the language. Therefore, even if the Passive rule constituted a criterial test for the NP/VP distinction in English, it cannot be a diagnostic test for such a distinction in Igbo. Secondly, all sentential complements in the language are subject to the same movement rules as Pseudo-Cleft and Topicalisation regardless of whether they function as subject or object, and although only one category of complements are subject to the optional rule of Equi-NP deletion, this fact is a consequence of the semantic characteristics of the main clause predicates involved. There is, therefore, no basis for ^{the} distinction into Verb Phrase and Noun Phrase complementation in Igbo, hence all sentential complements in this language are under the direct dominance of an NP node in Base structures.

What seems to happen is that a particular category of NP complements - the subjunctive ka/ma_1 complement may turn out at the surface as a VP-complement, if it is the output of Equi-NP triple. With the complement NP subject deleted under identity with the matrix (main clause) subject, the now subjectless verb becomes infinitivized, and thus is in the relation of a complementary verb to the main clause predicate, a fact which is shown by the tree diagram in Fig 6. Since only transforms of underlying NP sentential complements may have this surface structure, the NP/VP distinction in Igbo is a derived rather than a Base one.

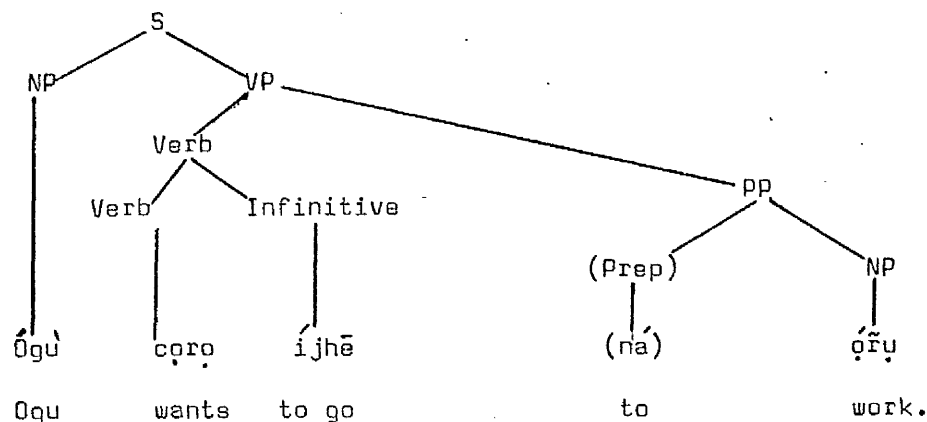


Fig. 6.

Chapter 9 Epilogue

One justification for undertaking a transformational analysis of a language is the expectation that it might give greater insight into language by showing how things fit together and by making some contribution to linguistic theory. This consideration has guided our approach to the analysis presented in this thesis: strict observation of the language data has been our guiding principle, we have not tried to force the Igbo language data into a descriptive mould designed with Indo-European languages in mind, and which may not necessarily fit Igbo as well as it fits, say, the English language.

Yet, if linguistic theories have any value, it lies partly in their general applicability to any human language, regardless of where it is spoken. For example, it is the case that all human languages have NP's and VP's, and that most, if not all of them, have such syntactic processes as Relativisation, Pronominalisation, Reflexivization, and probably Equi-NP Deletion. How each of these syntactic operations is formally characterised will surely vary from one language to another.

Furthermore, one of the claims of transformational generative theory is that grammar does not enumerate sentence types, but also shows relationships among them, where these exist, and characterises the tacit competence of the native speaker in using his language. The native speaker referred to here is the native speaker of any human language.

The present research has been carried out with a dual purpose: to provide an accurate account of Noun Phrase Sentential Complementation in Igbo, and from such an account make some useful, and possibly, general deductions about language and theories about it. In this concluding chapter of ^{the} thesis, we would like to discuss some issues raised here and elsewhere about the status of certain rules and concepts in transformational grammar. The issues concern the following transformational rules and related concepts:

- (a) Equi-NP Deletion,
- (b) Raising,
- (c) The Concept of Extrinsic Order, and
- (d) The Concept of the Cycle.

EQUI-NP DELETION

The conditions which determine the applicability of the above T-rule have been discussed in **8.2.0:417-423**. Only forward-looking predicates are subject to this rule which in Igbo triggers Infinitivization and Complementizer Deletion. From the accounts of NP-Complementation available to us - from English, Japanese, Akan and now Igbo - it is the case that only verbs which impose a sequence-of-tense constraint on the verbs of their sentential complements are subject to this rule of Equi-NP Deletion, and the propositional content of such complements is always open. Whether Equi-NP Deletion is optional or obligatory is language specific, (in Igbo it is optional, but usually obligatory for English) and does not affect the case we are going to make about the universal status of certain rules of grammar.

What the above facts about the applicability of Equi-NP Deletion suggest is this:

Every language has got various categories of verbs based on syntactic and/or semantic characteristics, such as transitivity versus intransitivity, stative as opposed to Action verbs, et cetera. If any category of verbs is characterised by a set of semantic features which have a corresponding syntactic reflex, then such a reflex is likely to be universal.

In other words, in every language, it is the category of forward-looking predicates which are going to be subject to the rule of Equi-NP Deletion and subsequent Infinitivization. We do not mean that the formal

characterisation of the above rules is going to be the same in every language, nor that every forward-looking predicate in any one language is going to be subject to them. On the contrary, it is to be expected that certain members of a category of verbs may be idiosyncratic in their syntactic behaviour, and this is a common phenomenon in language. Rather what we mean is that there is a rule of language called Equi-NP Deletion, whatever form it may take in any particular language, only forward-looking predicates are going to be subject to it.

Put strongly, then, the above hypothesis amounts to saying that Equi-NP Deletion is a semantic rule, since it depends crucially on the predicates concerned being forward-looking. In other words, only semantically determined rules of grammar may have a universal status in its very wide sense, and Equi-NP Deletion is one such rule. Bach(1965:18) touches on this point when he speculates about the probability of Relativization as a universal syntactic process thus: "The device discussed above (the T-rules relevant to Relativization in English, Japanese and Swahili) presumably have their counterparts in every language since their function is essentially to provide a new ad hoc expression for any person, place or thing, experience, process, function or feeling that a human being may want to name."

Closely related to the infinitive complements which are the output of the Equi-NP triplet (that is, Equi-NP Deletion, Infinitivization and complementizer Deletion) are those infinitives associated with the antecedent of Open Conditional Constructions when they function as NP-Complements to certain Emotive verbs. But there are some basic differences inspite of obvious similarities.

With forward-looking predicates, Equi-NP Deletion triggers such other rules as Infinitivization and Complementizer Deletion. But with Emotive verbs, infinitivization does not depend on a previous application of Equi-NP Deletion, but on an Agent Deletion rule which is, nevertheless,

optional, unless the indefinite Agent, A - "one" - is involved. However, there is this similarity that the proposition expressed by this type of subject-NP complement is an open one, as is the case with the complements of forward-looking predicates.

From the cross-linguistic evidence from all these unrelated languages - English, Japanese, Akan and Igbo - one could conclude that any rule of grammar which is semantically determined in the sense of Equi-NP Deletion is likely to be universal.

RAISING - Raising Subject to Subject:

Subject-Raising is a rule of the Igbo language, though a minor one, being restricted to a handful of non-factive Emotives which take Subject-NP sentential complement (cf 5.2.1.). There is no evidence for Object-Raising in the language, although Postal (1974) has argued for the existence of Object-Raising as a rule of English grammar.

EXTRINSIC ORDER

The argument generally given in defence of rule ordering is two-fold:

- (a) that without rule ordering, certain grammatical sentences could not be generated;
- (b) that without rule ordering, certain ungrammatical sentences could not be blocked.

The first argument seems to lack validity (cf Koutsoudas (1971, 1972, & 1973), Lehmann (1972), Ringen (1972), and Bonney (1974)). But in principle, there could be valid reasons for rule ordering based on the need to block certain ungrammatical sentences. However, as Bonney (1974) argues convincingly, even in such cases, rule ordering is unnecessary because there are other principles to ensure the correct results. Such principles include intrinsic ordering, the precedence of obligatory over optional rules and the concept of the cycle which upholds the precedence of cyclic over non-cyclic rules. Given these principles, the need for

extrinsic rule ordering is claimed to cease to exist, (cf Kimbal, ed. 1972).

As far as Igbo is concerned, our investigation reveals that there is no need for extrinsic rule ordering in order to block the derivation of certain ill-formed sentences. The rules given in this thesis are unordered, and any ordering relationship among them is intrinsic. The analysis of Igbo presented here thus lends support to the hypothesis that transformational rules are not extrinsically ordered.

But extrinsic order is supposed to be a kind of global derivational constraint since it makes the applicability of a rule at any given stage of derivation dependent not only on the structure of the tree at that point, but on what has happened at earlier stages in the derivation. Thus, if rule A is ordered before rule B, then after a point in a derivation where B has applied, A cannot apply even though a tree meeting its structural description is available. What prevents the application of A is something that happened at an earlier stage, namely the application of B. But given the cycle, it is claimed, extrinsic ordering can be dispensed with.

THE CYCLE

Since we have argued that given the cycle, it is possible to do away with extrinsic ordering, it seems to follow that the cycle is a necessary linguistic device in a transformational grammar of Igbo without extrinsic ordering. But we have argued that, although the cycle is a well motivated linguistic device for English, there is no need for it in a transformational description of Igbo. Reasons for this view have been given in the relevant section of this thesis/^(5.0.2.) We would like to dwell more on this view and its consequences for linguistic theory.

It seems that the existence of certain rules of grammar can be typologically predicted. For example, Igbo, like most Kwa languages, appears to have very little, if any, NP-Movement rules, apart from the rules of Extraposition, Ya' Movement and all such movement rules as are

relevant in Focus and Topicalisation. But these movement rules are distinct from NP - Movement in this important respect that they never change grammatical relations, (in the sense that Passivization can change a deep structure object into a surface subject) and are not subject to the complex constraints such as Cross-over Constraint, the Complex NP constraint, and the Co-ordinate Structure Constraint. The absence of Passive constructions from these languages can be predicted from the absence of the Complex NP - Movement rules.

Stahlke (1970) has observed that the absence of NP-Movement rules seems to correlate with the presence of verb serialisation for, according to him, "we find both Serialisation and the absence of NP - Movement transformations in the same languages," (Ibid. p. 95), a fact which leads one to expect that linguistic typology should enable us to predict what type of phenomena to expect from particular languages. Let us consider the above observation of Stahlke in relation to what has been described as formal linguistic universals, of which the concept of the cycle is supposed to be one.

It has been shown that the absence of certain rules of grammar from a particular language makes certain linguistic devices unnecessary for that language (cf 5.0.2:252-255). One such linguistic device is the cycle. The cycle is uncalled for because Igbo and typologically similar languages lack the Passive rule, and for them Raising is a very minor rule limited to a handful of intransitive verbs which take sentential subject complement. This being the case, the above two rules-Passive & Raising never interact. The question then arises as to whether the existence of such rules as Pronominalisation and Reflexivization is sufficient justification for the Cycle.

However, it is also the case that the same languages which lack NP - Movement but have Serialisation are the ones which have two morphologically distinct second and/or third person pronouns,

one self-referring, and the other non-self-referring. Thus we have the following forms:

<u>Singular</u>			
{ Ya }	(Igbo)	he/she/it	self-referring
			non-self-referring
{ Ye }	(Ewe)	" " "	self-referring
			non-self-referring
<u>Plural</u>			
{ Ĥi }	(Igbo)	they	inclusive
			non-inclusive
{ Yewo }	(Ewe)	"	inclusive
			non-inclusive

R.G. Armstrong (1963) made a similar observation with regard to Idoma and Yoruba, while Kevin Ford has pointed out that Avatime makes such a contrast. It is rather surprising that the Akan group of languages do not seem to make the same distinction which is characteristic of the Kwa language group (cf Clements 1973), whereas languages outside the Kwa group - Efik, (an Eastern Nigerian language), "Eskimo, Latin, Korean and Japanese have at least partially parallel phenomena" (Clements 1973: 2).

It happens to be the case that the group of languages which lack NP - Movement and have Verb Serialisation also have two separate pronouns for self- and non-self-reference, or for inclusive and non-inclusive use. Since these languages lack the Passive and Raising rules, and consequently have no need for the Cycle, they will not need the Cycle to determine their chain of co-reference. It will not even be necessary for the description of such a language to resort to the use of referential indexes. A simple feature specification will ensure that lexical insertion matches a superordinate NP with the appropriate self-referring or inclusive pronominal form in the embedded clause.

For example, the Igbo third person pronouns will have the following specifications.

$\begin{bmatrix} + \text{Pro} \\ + \text{3rd Pers.} \\ + \text{Sing} \\ + \text{Self-ref.} \end{bmatrix}$	$\begin{bmatrix} + \text{Pro} \\ + \text{3rd Pers.} \\ + \text{Sing.} \\ - \text{Self-ref.} \end{bmatrix}$
Ya	O
$\begin{bmatrix} + \text{Pro} \\ + \text{3rd Pers.} \\ + \text{Pl.} \\ + \text{self-ref.} \end{bmatrix}$	$\begin{bmatrix} + \text{Pro} \\ + \text{3rd Pers.} \\ + \text{Pl.} \\ - \text{self-ref.} \end{bmatrix}$
Hi	Umu

If lexical insertion is sensitive to these features, then the chain of co-reference will always be maintained, and the right meaning ensured. As far as Igbo is concerned, only the thirdperson is involved, whereas in other Kwa languages such as Ewe, both the second and third persons are involved. Admittedly, these features are semantic, and so is the problem of reference. The specification of these features as part of the lexical entries is in keeping with the view now held (cf Kempson 1974, and McCawley 1972) that if the so-called selectional restriction features are seen as inherent properties of lexical items, then the need to see them as a syntactic device will cease to exist. Since the chain of co-reference in Kwa languages can be effectively determined in this simple way, the need to invoke an otherwise unmotivated principle of the cycle will not arise.

The implications for linguistic theory of the foregoing discussion are as follows:

- (1) Languages which have no relation-changing NP-Movement rules have verb serialisation.
- (2) Languages which have no NP - Movement rules have no need for the Cycle.
- (3) Languages which satisfy the above two conditions also have two distinct pronoun forms in the second and/or

third person for self- and non-self-reference,
inclusive or non-inclusive use.

- (4) The Kwa Language group satisfy the above conditions.
- (5) The Cycle cannot therefore be a universal principle, or if it is a universal principle, universal in this sense must be typologically defined.
- (6) It seems to be the case that universals of language are those which are semantically determined, such as Equi - NP Deletion, Relativization and Pronominalisation.
- (7) The above observations call for a distinction between 'Absolute' Universals - that is, those universals which are likely to be found in all human languages - such as Equi - NP Deletion, Relativization and Pronominalisation, being rules of language which are semantically determined; and 'Relative' Universals, such as the Cycle and Extrinsic Order, which are likely to be either language specific, or language - group specific.

Appendix I

Chapter 10

Towards a Coherent Theory of Igbo Function Words:

Conjunctions, Complementizers & Prepositions

10.0.0 Introduction

The proposals in this chapter are tentative; here we are only suggesting a possible analysis of most function words in Igbo based on the synchronic evidence available to us. In particular, we offer some suggestions as to how to reconcile the apparently irreconcilable instances of Na in Igbo: there is strong evidence in support of the view that the so-called¹ Na prefix and Na relative are one and the same thing, being a form of the auxiliary verb ina which, along with a following verb-form expresses the Habitual or Progressive meaning. Similarly, Na conjunction (i.e. na in the structure NP - NP) and Na complementizer (i.e. na in the structure na`S) along with Na preposition are all associated with the same auxiliary ina. In other words, where we have made any distinction, it is a featural one. We have adopted the same method of approach for other conjunctions and complementizers such as ma₁ and ma₂.

Our approach is supported by the following facts of Igbo syntax. First, Igbo is a much more 'verb' language than, say, English. Where the English language employs such function words as 'to', 'from', 'with', et cetera, Igbo uses definite verb-forms. Secondly, some of the conjunctions in Igbo, (the monosyllables in particular) such as si, Na, ka and ma₁, and ma₂ can be shown to be associated with certain Igbo verbs, and for some of these conjunctions, it is possible to establish a transformational relationship between the structures where they function as conjunctions, and those where they function as prepositions, (cf 10.2.0: 472-77.) Thirdly, certain verb-forms are increasingly serving a

1 See Green and Igwe (1963), p. 165 for this analysis.

prepositional function, that is, they occur in structural positions where English employs prepositions. The forms in question are:

$\left\{ \begin{array}{l} \text{gbásara} \\ \text{banyere} \end{array} \right\}$	-	'concerning'
$\left\{ \begin{array}{l} \text{díkà} \text{ or } \text{dí} \text{ ka} \\ \text{nụna} \text{ or } \text{nụ} \text{ nà} \end{array} \right\}$	-	'like'
shí(te)	-	'from'

These, along with such other forms will be established as verb-forms in section 5.4.5. Their existence in the Igbo language shows that *Nà* is not the only preposition in the language. There are at least five other verb-forms which function in structures where English normally employs prepositions.

Our argument in this chapter will centre on the following monosyllables:-

sí, *Nà* *ka*, *ma*₁ & *ma*₂

Although we have included *màka* on the basis of its substitutability for *ma*₁, we have not generally considered such disyllabic conjunctions as:

$\left\{ \begin{array}{l} \text{kháma} \\ \text{thúma} \end{array} \right\}$	-	'rather than, instead'
--	---	------------------------

which we consider to belong to a different subcategory. Their use is illustrated in the following examples:-

- 1 (a) $\left\{ \begin{array}{l} \text{Kháma} \\ \text{Thúma} \end{array} \right\}$ *úka* *fụq*, *anyị* *kwụshi* *okwu* *ò*.

Instead trouble come out, we stop talk this:

Rather than provoke a row, let us suspend this matter.

- (b) $\left\{ \begin{array}{l} \text{Kháma} \\ \text{Thúma} \end{array} \right\}$ *ó* *nà* *ekwu'* *ezhi-okwū*, *ya* *ēbewe* *akhwā*

Instead h he is telling truth, he start crying:

Instead of telling the truth, he started crying.

- (c) *Ányị* *lawani*, *kháma* *ókwo* $\left\{ \begin{array}{l} \text{nà} \\ \text{fụq} \end{array} \right\}$ *áfụ* *úka*

We start going, you people, instead trouble come out.

Let us start going away, you people, instead of trouble ensuing.

1 (d) Kháma` ya', madhù` gwù' .

Instead of that, people finish: Rather than tolerate the situation, let us all perish.

(e) Kháma` ite shiri', nkhu gwù` (idiomatic)

Instead of pot remain on fire, firewood finish:

I had better find a solution to my problem, even if it means exhausting all my resources.

For these two conjunctions, there seems to be no traceable relationship, no matter how remote, with any Igbo verb.

10.1.0. Function Words as Predicates

The term, predicate, is used throughout this dissertation to denote the class of items which, on the basis of morphological characteristics, can be called verbs or verb-forms. These include auxiliaries as well as non-auxiliary verbs. By verbs, we mean the obligatory element in the Category, VP, (Verb or Predicate Phrase), which can be inflected for tense or aspect (cf 2.3.0 et seq.) with such affixes (prefixes & suffixes) as are associated exclusively with verbs. However, auxiliaries in Igbo are tense or aspect markers, and in that sense are not obligatory elements in a VP, except when the tense or aspect they help to express is called for. In Igbo, the Category, Verb, is identified by the citation form beginning with a harmonising, close, front, vowel prefix, I-, as in the following examples:

Íri	→	írī	to eat
Íra	→	írā	to eat (soup, oranges etc)

Igbo Auxiliary Verbs - (i) ina`

This auxiliary is distinct from the other two auxiliary verbs in the language in that it never occurs as the main and only verb of an Igbo clause, rather its presence always presupposes the presence in the structure of a following verb-form as in the following examples:

2 (a) Ogu` na agbáli` .
 Ogu { is trying } ; Ogu { is doing } his best .
 does try }

Igbo Auxiliary Verbs (ii) *iji* and *igā*

There may be many more members of this class. They are distinct from auxiliary (i) - *ina* in the sense that each of them can function in a non-auxiliary capacity, that is, as the only verb of an independent clause in the language:

3(a) *Ọnuọ́hà* *ji* *égbè*
Ọnuọ́hà has/is holding a gun

(b) *Ìjòkhu* *ji* *é'ò*
Njòkhu has money: *Njòkhu* is rich.

4(a) *Ndi* *mādhù* *agáchaala* *ahyā*
 People go all have market: People have all gone
 to market.

(b) *Íbè* *gara* *ákwukwò*
 Ibe went to school.

Examples 3-4 show the above auxiliaries functioning as main and only verb in the sentence.

In addition to the above, they also function as auxiliaries as in the following:

5(a) *Hwé* *oma* *ò* *ji* *adi* *gí* *mma?*
 Thing good it is to you good? Do pleasant things
 give you pleasure? Are you attracted to things that are morally
 upright?

(b) *Unu* *ji* *erí* *ede?*
 You do eat cocoyam: Do you eat cocoyam?

6(a) *Ágà* *m* *íjhè* *ahya* *eci*
 Will I go market tomorrow: I shall go to market
 tomorrow.

6 (b) Ógù ga $\left\{ \begin{matrix} \text{aǎú} \\ \text{iǎú} \end{matrix} \right\}$ ụlò yá (na) ebe è .

Ogu will build house his in place this:

Ogu will build his house here/in this place.

It is to capture this dual function that these two verbs and any others like them will have the lexical entries:

$$\left[\begin{matrix} +V \\ + \text{ aux} \end{matrix} \right]$$

whereas the other auxiliary ina has

$$\left[\begin{matrix} +V \\ + \text{ aux} \end{matrix} \right]$$

In other words, these syntactic functions are described in terms of feature specifications which indicate whether these verbs can be used only as auxiliaries (as in the case of ina) or as non-auxiliaries in one capacity (i.e., -aux) and as auxiliaries in another (i.e., +aux).

Having defined ina as an auxiliary verb, we shall devote the rest of this chapter to a justification of our claim that all the instances of na in Igbo are associated with this auxiliary verb ina, and that Igbo monosyllabic function words are associated with certain Igbo verbs. We start from the more obvious cases to the less obvious and more difficult ones.

The Complementizer Si

In chapter 4 (4.1.5) we have argued that the complementizer si is the unsuffixed stem of the verb isí - 'to say, declare, allege', and that its function as the only permissible complementizer with embedded imperative structures is due to the fact that it is a verb of saying, and that it can introduce the actual words of a speaker as though in quotes (once the necessary pronoun changes have been made). Let us now examine ka and the likely verb associated with it.

10.2.0 Kà` & M̀ Subjunctive Complementizers

Now consider the complementizer Kà` and its relationship with Káá, which means 'please, be willing.' In order to see them in their true perspective, let us cite the following three forms of the auxiliary verb ina.

<u>Citation form</u>	<u>Imperative form</u>	<u>Stem</u>
<u>ina</u>	Náá (+ verb form)	Ná
-	Káá	Ká

Note that the imperative form of ina never occurs alone as does káá, but only in the following type of example:

7(a) Náá ázá ụlò (vb. ịzá class 2)

Go on sweeping the house.

(b) Na(a) erí ĥwē (vb. ịrī class 1).

Go on eating (something).

The low-tone vowel suffix is obligatory with Tone class 2 verbs, but optional with Tone classes 1 & 3 verbs.

The identity of tone pattern of the imperative form and stem of the above two items does not strike us as mere coincidence, especially as their Imperative/Hortative tone pattern is not one that we would normally associate with the generality of Igbo verbs. The reverse is, in fact, the norm, as the following examples show:

írī (verb class 1)

ífù (" " 2)

íbyā (" " 3)

$\left\{ \begin{array}{l} R\acute{i}\bar{e} \\ R\acute{i}\bar{e} \end{array} \right\}$: eat!

Fùò : go out

Byàá : Come

The above examples show that for some speakers, it is a uniform low tone for all verb-stems, be they class 1, 2 or 3 verbs; for other speakers like us, it is a low-tone stem for classes 2 & 3 verbs, and a high-tone stem for class 1 verbs. But for all speakers, the vowel suffix (where there is one) is always on a high-tone, never on a low one. Obviously Náá and Káá behave

irregularly with regard to their tone pattern in the Imperative or Hortative. But whereas ina exists as an auxiliary verb (established as such on the basis of its morphological and syntactic characteristics, (cf p.231f) Kaa is defective, surviving only in this imperative form, with the meaning 'please, be willing'. Thus, it lacks the citation form ?ika which would correspond to ina above. Kaa has the following equivalents:

In English	-	please
" French	-	veuillez
" German	-	Bitte

In diachronic, if not synchronic, descriptions, the above are verb-forms.

Let us now examine the following sentences in which Kaa and Ka function.

8(a)(i) Kaa, ya gbakhee

Please, he recover: Please God, let him recover/May he recover.

(b)(i) Cukwu mee, { Kaa, ya } gbakhee

" (ii) { Ka { ya } } "

God, bring about, please he recover: May God bring about/his recovery.

(c)(i) Asi m, kaa, ya lokwa na udho

(ii) " " ka o lokwa " "

Say I, please, he return in peace

I wish him a safe/peaceful return.

(d)(i) Cere ka m bya

(ii) " kaa, mu bya

Wait, please, I come back: Wait until I return.

(e)(i) Kaa { mu } lawa

Ka { m } "

Please, I start going: May I go?

Let me go.

From these examples in 8(a)-(e), it is observable that *káà* and *kà* function in similar, if not identical structures - each precedes what we have described as the Subjunctive Complements, the only difference being that *káà* is used generally in clauses of direct entreaty, whereas *kà* is used elsewhere. Furthermore, *káà* generally takes the separable pronoun subject - *mú*, *yá* et cetera, whereas *kà* is normally associated with the inseparable ones such as *ím*, and the harmonising *ú*, at least in my dialect.

It is important to point out that if nouns rather than pronoun subjects are present, and if the pronoun subjects present are in the plural, there is no difference whatsoever between *káà* and *kà* clauses, as 9(a)-(c) show:

9(a) $\left\{ \begin{array}{l} Káà \\ Kà \end{array} \right\}$ ányí gawakwani

Please, we start going: Let's start going.

(b) *Káà Ógù cetékwe ñhwe m gwàra yá'*

Please Ogu remember what I told him.

May Ogu remember what I told him.

(c) *Ác'òrò m ka Ógù cetékwe ñhwe m gwàra yá'*

I wish Ogu to remember what I told him.

And lastly, the meaning of the structures is not affected whether *káà* or *kà* is the conjunction.

From the above syntactic and semantic facts, we conclude that there is a very close relationship between *káà* and *kà*. We suggest that *kà* is a defective verb lacking the citation form *íkà*, and existing in its Hortative form in the sense of the English word, please.

Our hypothesis is that it is this same *kà* (associated with *káà*) whose syntactic function has been extended to the following

(i) EXTRAPOSED CLAUSES:

10(a) *Ó wū athurū ocha kà Díkhē c'ògha*

It is the white sheep that Dikhe is looking for.

10 (b) Ọ́ wụkwani okwu di mkpa ka a na ekwu.

It is an important matter that is being discussed.

For speakers of our dialect, however, the popular equivalent of 10 (a) and (b) are 10 (c) and (d).

10 (c) Ọ́ wụ athurū qca wū hwe Dikhē cōgha

(d) Ọ́ wụkwani okwu di mkpa wū hwe a na ekwu.

Thus in place of ka our dialect uses the verb iwū followed by the proform - hwe. The gradual spreading of the ka version is, however, a noticeable phenomenon.

(ii) TEMPORAL CLAUSES

The following use of ka in Clauses of Time should also be noted:

11. Ahwūry m nde ehi { ka' mgbu nga' og'e } ha lōta.

I saw those people { while when as } they were returning.

As in the previous examples, this dialect employs the alternatives to ka enclosed along with it in braces in examples 11, and this explains the fact that in this dialect ka never occurs in sentences such as 10 & 11. We may also point out that the distributional characteristics of ka and kāā is likely to vary from one dialect to another.

Thus far, we have shown that the conjunction ka is associated with the defective verb kāā, and that they function in similar syntactic structures with a definite and consistent meaning. Since there is no ka preposition in this dialect, the question of relating the conjunction to the preposition does not arise.

Ma, Complementizer & Preposition

We now come to consider the complementizer mà₁ with which kà is in free variation in certain Igbo Purpose constructions. The following exemplify such constructions:

- 12(a) Ábýàrà m ka ányì kwuzhie

Came I so that we talk right: I came for us to
sort it out.

- [illegible]

Maradie cooked food quickly so that husband her
rifuo ñwē bya igāwa ahya
be able to eat thing come going market: Maradie prepared
the food quickly in order for her husband to be able to eat
before setting out for the market.

- (c) Āzùrù ñĩ ndi ezè apiríkó $\left\{ \begin{array}{c} k\grave{a} \\ m\grave{a} \end{array} \right\}$ íkpe laara ñĩ

Bought they the chiefs bribe so that case go to them:

They bribed the chiefs so as to win the case.

- (d) Gádaara m̄ ozhi è { ka } m' zutara gī igwe
ma

Run do for me errand this so that I buy for you cycle:
Do go on this errand for me so that I might buy you a bicycle.

As can be observed from the foregoing examples, ka and ma are in free variation. Now compare 12(a-d) with 13(a-b).

- 13(a) Nwa'-āgboghō ò na acókwanì kà í luwa yā

Young girl this is desiring that you marry her:

This young girl wants you to marry her.

- (b) 0' khwò ma ányi lemachaa yā

She intends that we look well complete her:
She wants us to have a thorough look at her.

In sentences such as 13(a) and (b), kà and mà are not interchangeable in this dialect. The explanation for this is the presence of the verbs íco and íkhwo in 13(a) & (b) respectively. In this dialect, the former is marked for kà and the latter for mà. The free variation of the two complementizers therefore has its constraint: they are in free variation in surface structure just in case neither of the predicates is present. The optional deletion of these two optative verbs and the constraints governing such a deletion are discussed in chapter 8(8.1.0). It is the violation of the co-occurrence restrictions between ico and ikhwo on the one hand and kà and mà on the other which accounts for the deviance of 13(c) & (d).

13(c) *Ácòrò m ma ányí gaa n'og'è
 Want I that we go in time: I want us to go
 in time.

(d) *Ékhwo m ka ó rie ñwē
 Intend I that he eat thing: I want him to eat
 something.

Apart from the fact that each of these two verbs selects a different complementizer, their syntactic behaviour is similar: each of them introduces a subjunctive complement as object expressing the same type of meaning thus:

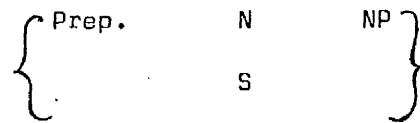
14(a) Ábyara m còpò kà dókítà ñwú m̄
 (b) " " khwòró mà " " "
 Came I {wishing
 {intending} that doctor see me

I came so that the doctor might see me.

In view of the identical behaviour of kà and mà in subjunctive complementation, we assign the same status to both of them. Since kà has been shown to be associated with an erstwhile verb káà, we also assume that mà₁ must be diachronically described as a verb.

Ma₁ in Prepositional Function - (Ma NP).

Our Ps-rule 10 (cf 4.2 p.208) shows that Reason can be re-written as



where N = íhì 'sake'

Examples of Igbo sentences illustrating the first of the above structures -

Prep. N NP were given in the section referred

[íhì]

to above. The second alternative is the structure which involves an S;
it is this structure that is relevant here. The following are illustrative
examples:

- 15(a) Ányì byara khworó gĩ
We came having in mind you: We came because of you/
for your sake.

15 (a) has the following underlying structure:

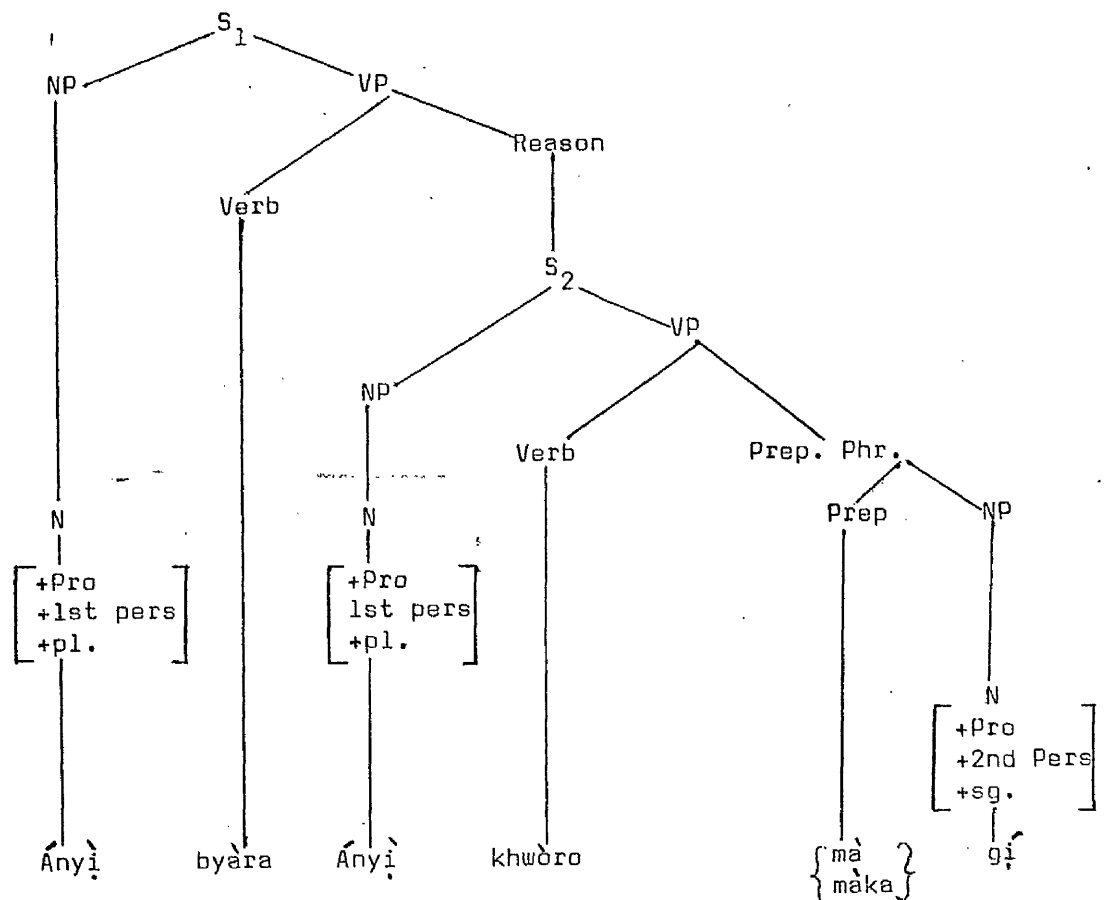


Figure 1

From the above string, we derive 15(b)-(d) thus:

- $\begin{array}{ccccccc} \text{Ányì} & & \text{byara} & & \text{ányì} & & \text{khworó} & & \text{gí} & \Rightarrow & 15(b) \end{array}$
 15(b) $\begin{array}{ccccccc} \text{Ányì} & & \text{byara} & & \text{khworó} & & \text{mà} & & \text{gí} & & \text{(by obligatory Equi-NF deletion)} \end{array}$
 (c) $\begin{array}{ccccccc} \text{Ányì} & & \text{byara} & & \left\{ \begin{array}{l} \text{ma} \\ \text{maka} \end{array} \right\} & & \text{gí} & & \text{(by optional optative verb deletion)} \end{array}$
 (d) $\begin{array}{ccccccc} \text{Ányì} & & \text{byara} & & \text{khworó} & & \text{gí} & & \text{(by optional Comp. deletion)} \end{array}$

15(b-d) are each well-formed, and (d) is the same as (a). Thus, with khworó as the verb of the sentence directly dominated by the Reason node, after the obligatory deletion of the subordinate subject NP under identity with the main clause subject NP, we can optionally delete either khworó to derive 15(c) or $\left\{ \begin{array}{l} \text{mà} \\ \text{maka} \end{array} \right\}$ to derive 15(d).

Similarly, the following 16 & 17 (b-c) are the output of the same transformational rules:

- 16(a) $\begin{array}{ccccccc} \text{Érile} & & \text{unèné} & & \text{khworó} & & \text{mà} & & \text{áfo} & & \text{gí} \end{array}$
 (b) $\begin{array}{ccccccc} " & & " & & \text{khworó} & & \text{áfo} & & \text{gí} \end{array}$
 (c) $\begin{array}{ccccccc} " & & & & \text{mà} & & \text{áfo} & & \text{gí} \end{array}$

Eat not bananas regarding stomach your: Do not eat
bananas for the sake of your stomach.

- 17(a) $\begin{array}{ccccccc} \text{Í} & \text{ga} & \text{ná} & \text{ámá} & \text{ogwū} & \text{ò} & \text{khworó} & \text{mà} & \text{úkwy} & \text{gí} \end{array}$
 (b) $\begin{array}{ccccccc} \text{_____} & & & & & & \text{khworó} & \text{úkwy} & \text{gí} \end{array}$
 (c) $\begin{array}{ccccccc} \text{_____} & & & & & & \text{mà} & \text{úkwy} & \text{gí} \end{array}$

You will keep rubbing medicine this regarding foot your:

You will keep rubbing this medicine for the sake of your foot.

It must be pointed out that, sentences such as 16 & 17 are derived from a deep structure such as fig 2 in which the verb khworó takes a sentential complement (cf 3.1.0: 409). But the VP of this embedded subjunctive complement has been deleted, given the appropriate context; that is, VP3, the verb phrase of the lowest sentence S₃. This type of deletion (the constraints governing it are not yet clear) does take place

in a number of Igbo structures: in causative constructions and in Purpose clauses. It is the VP that is always deleted,

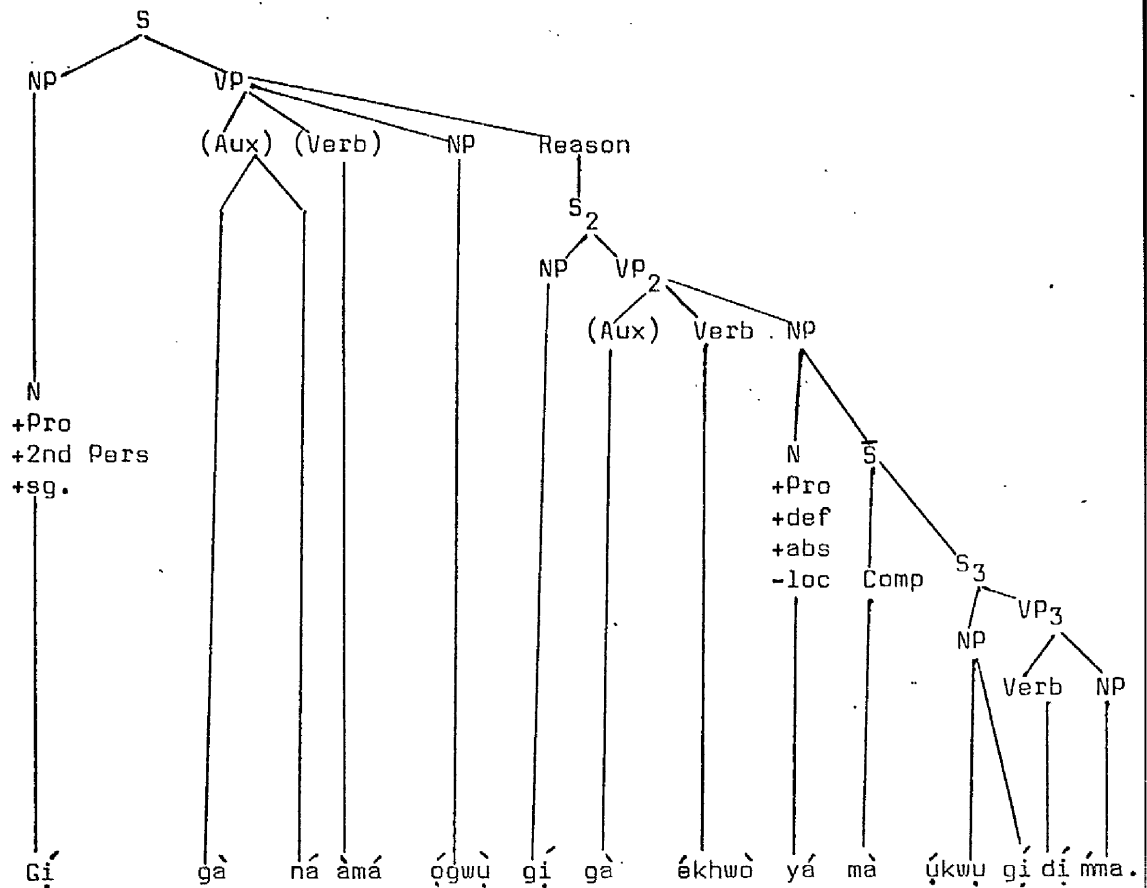


Fig 2

a curious situation in view of the fact that Gapping in Igbo rarely involves verb deletion. However, from these examples, it is obvious that surface Prepositional phrases as in 16 & 17 do, in fact, derive from underlying subjunctive complements after the optative verb íkhwò. In other words, the ma subjunctive complementizer and the ma preposition are one and the same thing in underlying structure.

The implication of the foregoing analysis of kà and mà is that we are making a definite distinction between the Causal/Purpose mà and the other homonym mà associated with Yes/No questions when embedded as NP-complements. This is precisely what we are claiming: judging from the different moods which

their respective structures express in both formal and semantic terms, one is justified in treating them as two separate items, hence the use of the subscripts 1 & 2 to distinguish them. Moreover, the interrogative $m\grave{a}_2$ has no corresponding prepositional function as $m\grave{a}_1$ has.

10.3.0 $M\grave{a}$ Interrogative Complementizer

It seems that, unlike $k\grave{a}$ & $m\grave{a}_1$ for which we have argued a case for verb status, $m\grave{a}_2$ interrogative complementizer is only a verb complement to a known Igbo verb. Consider the following examples:

18(a) $\acute{A}s\grave{i}n\grave{i}$ m (mara) $m\grave{a}$ \grave{o} $l\acute{a}l\acute{a}$

Say I know whether has he gone: I am wondering whether he has gone.

(b) $\acute{A}k\grave{p}\acute{o}n\grave{i}$ m (s\acute{i}) (mara) $m\grave{a}$ \grave{i} $m\acute{u}$ $\acute{a}n\acute{y}a$

Thinking I say know if you are awake:

I am wondering/considering whether you are awake.

(c) $\acute{E}c\acute{e}n\grave{i}$ m (s\acute{i}) (mara) $m\grave{a}$ $\grave{u}n\grave{u}$ gara $\acute{a}g\acute{a}$:

Think I say know if you went:

I was trying to figure out whether you did go.

The above examples 18(a-c) derive from an underlying structure such as that of fig. 3.

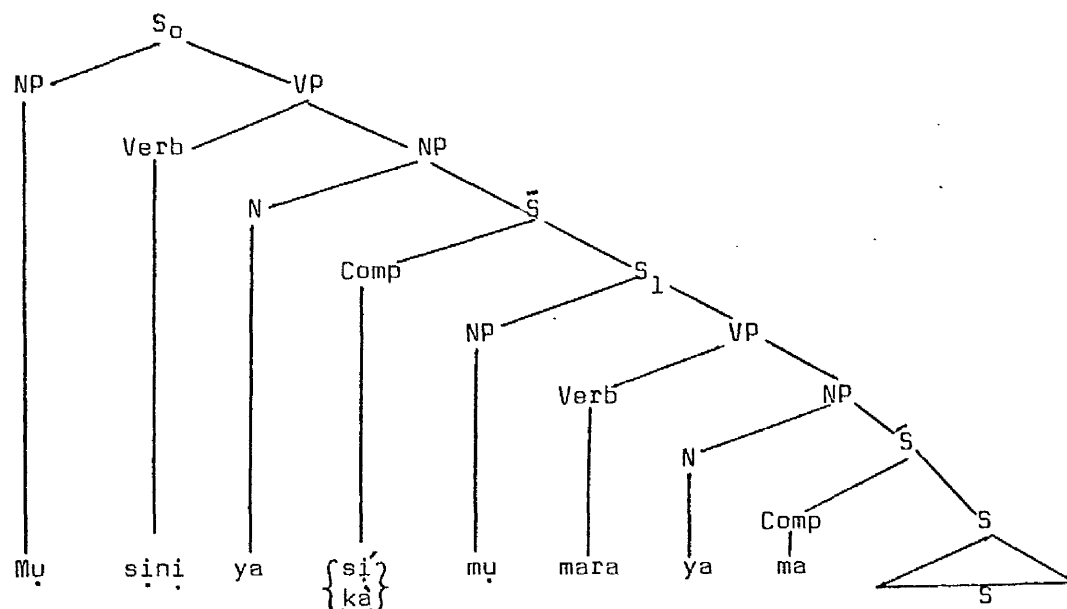


Fig.3

To the above strings, we apply the following T-rules in order to derive sentences such as 18(a-c); non-essential details have been omitted:

- (i) Ásini m ya $\left\{ \begin{matrix} sí \\ kà \end{matrix} \right\}$ mú mara ya mà S
(by obligatory Pronoun Post-position)
- (ii) Ásini m kà mú mara mà S (by oblig. yá Deletion, 2 applications)
- (iii) Ásini m mú mara mà S (by obligatory Comp. Deletion)
- (iv) Ásini m mara mà LS (by optional Identical NP deletion)
- (v) Ásini m mara mà S. (by phonological rules)

From examples 18(a-c), it will be observed that mara is optional; in other words, it can be deleted without any loss of meaning to give (vi)

- (vi) Ásini m mà S.

What we have just illustrated is the derivational history of $mà_2$ interrogative complements in Igbo. In our dialect, the following sentences transformationally related to those of 18 are commonly used to express doubt.

19(a) Ma ò láala : Could he have gone?

(b) (Mara) mà ò nwúona : Perhaps, he is dead.

In embedded Yes/No questions, however, the shorter version with mara deleted is generally preferred, thus:

20(a) I' ceni (sí) mà m wú ebiri gí?

You think then saying whether I am age you: Are you then wondering whether I am your age/Are you presuming that I am your age?

(b) I' sini mà anyi wú ndi ohí?

Are you then wondering whether we are thieves?

" " " presuming that " " " ?

Our hypothesis is that $mà$ interrogative ($mà_2$), like ka & $mà_1$, is also a predicate which complements the verb ima 'to know' and in combination with it express such meanings as doubt. 19(a & b) show this fact. The fact that

such an expression as márá mā can be used independent of a matrix clause is an indication of the closeness of the two items. It seems that mā was first and foremost a complement to íma before this syntactic function spread to other verbs of the language which can take yes/no questions as complement. Once this syntactic function got extended to other verbs, of the language, it then ceased to be the unique complement of íma that is originally was, and as a consequence, márá became optional, hence the possibility of deleting this verb of 'knowing' in interrogative complementation.

All this explanation may sound far-fetched, but at times irregularities in synchronic data do make sense if seen in their historical perspective.

In the remaining part of this section on mā₂ interrogative complementizer, we want to see whether this complementizer has any relationship with such other homonyms in the language, as

<u>mā</u>	Conditional	conjunction
<u>mā</u>	Temporal	"
<u>mā</u>	Disjunctive	

10.3.1 mā Conditional & Temporal

Consider the following sentences:

21(a) Gwá m̄ mā ya bya

Tell me { if } he comes
 { when }

(b) Ya bya, gwa m̄

If he comes, tell me.

(c) m̄ ga íme giri mā m̄ hwu yā ?

I shall do what { if } I see him
 { when }

What shall I do, if I see him?

21(d) m̃ h̃w̃ỹ yā, m̃ ga ímē girī?

If I see him, what shall I. do?

Note from the foregoing examples that m̃ is obligatorily deleted whenever the conditional clause is preposed - that is, whenever it appears in initial position as in (b) and (d). Now let us compare the above conditional constructions with the English counterpart: "I shall punish him, if he comes late". This can be paraphrased as "I shall punish him, depending on whether he comes late or not". Here as in the Igbo examples, we have a dependency relation as between an antecedent and its consequent as in logic, thus

$X \longrightarrow Y$ (if X, then Y).

Although the tone pattern of the underlined Igbo conditional clauses (in 21) suggest the contrary, (cf the fact that all pronoun subjects in m̃ interrogative complements are on low tones) there is a lot of syntactic reasons to justify relating m̃ conditional with m̃ interrogative. In order to establish these syntactic reasons, it is necessary to give the full form of conditional constructions of the type given in 21 above.

22(a) A' sī(i) nā' o' ga' abya', kədú h̃we m ga' emé?

If one says that he will come, what thing I shall do:

If he comes, what shall I do?

(b) A' sī nā' o' byāra abya', kədú h̃we m gāra emé?

If he came what should I have done?:

If he had come, what should I have done?

(c) A' sī nā' o' byāla, kədú h̃we m gāra emé?

If he has come, what am I going to do?

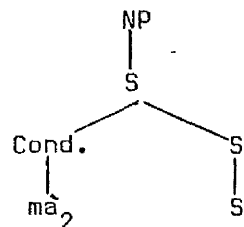
If he had come, what should I have done?

It will be observed that with what we describe as the full form, various verb forms (tenses/aspects) are possible in the m̃ conditional clauses; in the absence of the full form, only the open condition ³

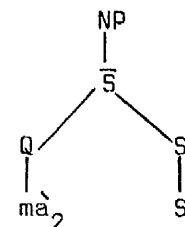
3 Conditional constructions are discussed further in chapter 6(6.2.0) where the relationship between questions(Yes/No type) and conditional constructions is examined in greater detail.

(simple present/future tense) is possible. Note also that from these full forms, what we underlined in 21 as the conditional clauses represent Nà sentential complements which are the NP objects of the verb ísi 'to say', but with this difference that the propositional content of this Nà-complement has been cancelled by the fact of the construction being conditional. The fact that these conditional clauses are some sort of Nà-complements explains the tone pattern difference observable in pronoun subjects in mā interrogative complements on the one hand, and conditional clauses on the other. However, despite this tone pattern difference, if the conditional clause is embedded as an NP, then it is realised as a mā S structure in which pronoun subjects, if any, have exactly the tone pattern that is associated with Yes/No questions, that is, low or low-low tone pattern. Thus, 23(a) & (b) are both realised as mā₂ S, that is an interrogative NP complement.

23. (a)



(b)



As we observed in 4.3 (p. 214) mood and complementizer selection are mutually dependent, we can predict one from the other.

In addition to the above evidence, there is yet another syntactic justification for relating conditionals and Questions; this evidence is furnished by the way that òwùlā 'any' co-occurs with interrogative, conditional and negative structures generally, but not with affirmative constructions.

24(a) Gwá m mā ónye òwùlā byá .

Tell me { if anybody comes.
 { in case }

24(b) Gwa' m̄ ma' ónye ɔ̄wula kuru áka .
 Tell me { if anybody knocked.
 { whether }

(c) { Ónye ɔ̄wula' }
 { Mádū " } byála, kpo m̄ .
 { Nwókho " }

If { anybody } comes, call me.
 { any man }

25(a) O' nwere ónye ɔ̄wulá byāralanī?
 It has person who it be who has come: Has anybody come?
 Is there anyone who has come?

(b) Ájūgha m̄ ya ma' oonwere ónye ɔ̄wulá nō n'ulō.
 I am asking him if there is anyone at home.

If the above 24-25 are compared to the following 26, the deviance of the latter are thus understandable.

26(a) * O' nwere ónye ɔ̄wulá byāralanī .

* There is anybody who has come

(b) * Áhwuna m̄ na' ó nwere ónye ɔ̄wulá nō n'ulō.

* I have seen that there anybody at home.

(c) * Gwa' m̄ na' ónye ɔ̄wulá byá .

* Tell me that anybody come

Unlike 24 & 25 which either question or seek for information, those of 26 make an affirmation, and their deviance can be corrected by deleting from the sentences the item ɔ̄wulá.⁴ On the basis of the foregoing syntactic

4 It is necessary to point out that there is much more to the syntax and semantics of ɔ̄wulá than we have room for here. For example, the following, though affirmative in meaning, are perfectly well-formed

- (i) Gwa' m̄ na' ónye ɔ̄wulá kuru áka n'uzò
 Tell me that everybody knocked at the door.
 (ii) Áhwuna m̄ na' ónye ɔ̄wulá nō n'ulō
 I have seen that everybody is at home.
 (iii) Gwa' m̄ na' ónye ɔ̄wulá byara.
 Tell me that everybody came.

These examples show that in Affirmative constructions, the same item means 'every', but 'any' in negative, conditional and interrogative structures. The specific meaning is thus determined by context.

characteristics, we therefore group mà conditional together with mà interrogative. It is not a mere coincidence that 'if' and 'whether' are complementizers in English, as Bresnan (1970) has convincingly argued, although one might counter by claiming that there are two 'if's' in English - a position which would make a general statement about English conjunctions difficult, if not impossible.

However, the Igbo conditional & temporal conjunction mà and the interrogative mà can all be subsumed under mà₂ on the basis of syntactic similarities, and paraphrase relationship - the fact that none of these two clause types - Conditional and Interrogative clauses - affirms or asserts a fact.

10.3.2 The Disjunctive mà

The mà conjunction being considered here is found in the following type of sentences:

27(a) Á kpòrò hí akpò $\left(\begin{array}{c} \{ \text{màna} \} \\ \text{mà} \end{array} \right)$ hí āju íbyānì

One called them call (but) they refused to come:

They were called, but they refused to come.

(b) Nwáányí a tófùrù etófù $\{ \begin{array}{c} \text{màna} \\ \text{mà} \end{array} \}$ íhù yā jòrò njò
 Woman this is tall come out (but face her is ugly.

This woman is pretty tall, but her face is ugly.

As can be seen from 27 (a & b) mà and màna can be used interchangeably just in the same way that mà₁ and màka are in free variation with each other. The meaning expressed by mà in 27 is what Robin Lakoff (1971) describes as 'denial of expectation', a meaning which is not necessarily due to the conjunction as much as to the juxtaposition of the two clauses in 27(a) or (b). The obvious question to ask is whether mà in 27 is related to mà₂ interrogative conjunction.

We would like to answer positively that they are related, despite the fact that examples 27(a) & (b) contain co-ordinate structures, while the domain of ma_2 is subordinate constructions. This being the case, the reader with an analytical knowledge of English might wonder at our attempt to equate a subordinating conjunction with a co-ordinate one, since such a distinction happens to be for English the right peg on which to hang the corresponding distinction into co-ordinate and subordinate clauses.

The traditional distinction between co-ordination (conjoining) and subordination (embedding) is syntactically motivated and, most probably, a universal one. In most languages of the world, especially the Indo-European group, the above distinction happens ~~totally~~ with the subcategorisation of conjunctions into co-ordinating and subordinating sets. Thus, while the co-ordinate-subordinate clause distinction may be universal, the corresponding distinction into co-ordinating and subordinating conjunctions may only be language-specific, and therefore lacks a universal status.

Igbo distinguishes between co-ordination and subordination, but a corresponding distinction into subordinating and co-ordinating conjunctions is not necessarily the right peg on which to hang such a distinction in the language for the following reasons:

- (i) there are only two conjunctions in Igbo which may be described as co-ordinating; they are ma 'but' and na 'and'. These are homonymous with the corresponding subordinating ones (complementizers); moreover, they have an identical tone pattern - all being low-tone monosyllables. It is not mere coincidence that this is the situation in the language.
- (ii) There are other criteria for distinguishing between co-ordinate clauses and their subordinate counterparts viz - the symmetry between co-ordinate structures on the one hand, and on the other, the asymmetry between a main clause and the subordinate one

dependent upon it.

- (iii) Igbo subordinate constructions are characterised by the general presence of specific conjunctions, while co-ordinate ones are not so-characterised. For example, sentence con-joining⁵ in Igbo is by means of serial constructions involving no conjunction whatsoever either in deep or surface structure, but subordination does obligatorily involve one conjunction or another in both underlying and surface structures, although some of these conjunctions may be optionally deleted in surface structure given certain conditions (cf 7.2.0 p.397ff & 8.2.0 p.417ff)

- (iv) A knowledge of the specific conjunction involved in an Igbo construction is not a sufficient indicator of the construction type in question, it is still necessary to know whether this construction type is a co-ordinate or subordinate one. This contrasts with the situation in English where 'and' & 'but' will always introduce co-ordinate structures, and 'if', 'although' et cetera will invariably mark subordinate clauses.

We conclude, therefore, that there is no need to distinguish in Igbo between co-ordinating and subordinating conjunctions.

Our conclusion, though tentative, is as follows: There are two types of *ma'* in Igbo

- (i) *Ma'*₁ Purpose conjunction in free variation with *ka'*. This *ma'* conjunction is transformationally related to the preposition *ma'*.

5 There is, however, a category of co-ordinate sentences which involves the conjunction *Na'* 'and' as in the following:

Ogu na nwie ya byara abya.
Ogu and his wife came

The derivation of the above Igbo sentence is fully discussed in 10.4.3 p.491 ff, where NP *na'* NP structure is shown to derive from deep structure conjoined sentences.

- (ii) Ma_2 interrogative conjunction; under this conjunction are subsumed ma conditional conjunction,

ma temporal " , and

ma co-ordinate " which is in free variation

with mana. Both ma and mana are optional elements in conjoined structures.

10.4.0 The Na's in Igbo

Having first disposed of less complex cases, we now come to a thorough examination of the various Na's in Igbo - a much more difficult task. Our claim is that all the Na's in Igbo are associated with the auxiliary verb, ina (cf 10.1.0 p.). Before we go on to the task of justifying this claim, let us first of all try to reconcile all the apparently irreconcilable instances of Na in the language. After we have shown them to have one underlying source in deep grammar, then we shall go on to justify the view that the auxiliary verb ina is the most probable source of these na's and suggest how the grammar should cater for them.

10.4.1 The Auxiliary Verb ina

In addition to examples 2(a-h) (cf 10.1.0 p. 464) the following help to bring out the auxiliary function of the above auxiliary verb:

- 28(a) O' na' abya' . (Na present progressive, affirmative)

He is coming

- (b) $\text{O' na\~{h}i\~{i} \grave{a}by\grave{a}}$. (Na present prog., negative)

He is not coming

- (c) $\text{O' na\grave{a}ra az\acute{u} ahy\bar{a}}$ (Na past prog. affirmative)

He used to buy market. He used to be a trader.

- (d) $\text{O' na\~{h}i\~{i}r\grave{i} \grave{a}z\acute{u} ahy\bar{a}}$. (Na past prog. negative)

He never used to be a trader.

28(e) Ya' na àgá ahyā, ọ̀ gá ịzùfu ụmụ yá (Na' conditional)

If she keeps going market, she will be able to train children her:

If she keeps on trading, she will be able to bring up her children.

(f) Gí na èmé otho ọ̀, ọ̀ díí mma. (Na' conditional)

If you keep doing manner this, it is not good: If you keep on behaving this way, it is not good.

(g) Mā ọ̀ nāhị́ agá ahyā, ọ̀ gáhị́ ịzùfu

If she does not go market, she will not be able to train ụmụ yá. (Na' conditional Neg.)

children her: If she does not go on trading, she will not be able to train her children.

In the foregoing examples, it will be observed that the tone of the auxiliary verb na has varied from one clause/sentence type to another: It is low in progressive (past & present) affirmative, but high in the corresponding negative. It is uniformly high in conditional constructions (affirmative and negative). Despite these tone variations dictated by context, we are still dealing with the same underlying verb ina.

Now consider the same auxiliary in relative clauses:

29(a) Ọnye $\left\{ \begin{array}{l} \text{nà} \quad \text{agá} \\ \text{ná} \quad \text{āga} \end{array} \right\}$ ahyā n'og'è na aló n'og'è.

He who goes to market in time returns in time.

Note that there are two permissible tones on na in 29(a) above; a low tone nà followed by a low tone prefix, or a high-tone ná followed by a high-tone prefix on a downstep.

29(b) Ụwé Ogu ná eti ná adí ụcha.
" Ogu ná èti " " "

The clothes which Ogu wears are usually clean;

29(b) reveals yet another permissible pattern - a high-tone ná followed by low tones on both prefix and the following verb-form, regardless of the class of verb concerned. (cf examples 31-32 for explanation).

The tone on na will vary according to the type of relative clause being considered. For example, in Relative A type, we consistently get a high-tone na followed by a downstep vowel prefix on the following verb-form, as in 30(a-e):

Rel. A

30(a) Dikhẽ na āgba m̃gba .. : Dikhe who wrestles/Dikhe the wrestler.

(b) Nwókhō na ēžu ohĩ : A man who steals ...

(c) Ókhe mādhy ná āry àla .. : An old man who defiles the land: a dishonest old man

(d) Ónye ukwu na ēžu ohĩ ... : A big man who steals.

In Relative B, on the other hand, the tone on na is generally low, and the vowel prefix will be high for Tone class 2 verbs, but low for members of Tone classes 1 & 2 thus:

Rel. B

31(a) Uwé m ná etí' ... The clothes that I wear ...

(b) Ébe Ogú ná agá (The place) where Ogu goes ...

(c) Óg'e Díkhe ná áfù' (The time) when Dikhe goes out ..

(d) Ụlọ " " aza The house which Dikhe is sweeping.

But a certain degree of variation is also possible in Rel.B clauses, though it carries with it a semantic shift. For example, any of 31(a-d) may have a habitual or progressive interpretation; thus, 31(a) can be translated as either (i) or (ii) below:

(i) The clothes which I wear (habitually) or

(ii) " " " I am wearing (on-going action)

But with 30 or the following 32, in which the auxiliary is on a high tone, only a habitual meaning is possible:

32(a) Uwé m ná eti (vb cl.3) the cloth which I wear

(b) Ébe Ogú ná àga (" " ") where Ogu goes ...

(c) Ókwu na ò kwu (" " ") what he says/the way he talks.

32(d) Ụlọ́ na ọ̀ za (vb cl.2): The house he sweeps

(e) Írì na ọ̀ ri (" " 1): The food he eats

Observe that in this type of relative clauses in which Na' is on a high tone, all the three classes of verbs are on low tones as if they were all members of tone class 2. This tonal behaviour of verbs occurs only in Relative B Affirmative, never in the Negative counterpart.

In the following idiomatic expressions in Igbo, the same tone pattern is observable:

33(a) (Na') ebe na ọ̀ byala, ányị́ lawanị́

In place where he has come we go away then:

Since he has come, let us go away, then.

(b) (Na') ebe Ada m̄ na àh̄wuna m̄, ya gàwá

Since daughter my has seen me, she start going:

Since my daughter has seen me, she can set out on her journey.

(c) (Na') ebe na ọ̀ mutachaala, ya' kwòróni gàwá

Since she learnt complete, she drive go on:

Since she has mastered the art of driving, let her drive on.

Note that in the idiomatic expression, Na' ebe 'since', the Na' is optional. In Conditional as well as in Relative clauses Na' is generally on a high tone. This fact does not make it different from the low-tone Na' elsewhere any more than the high and low-tone ga's are different verbs in the following 34:

34(a) Ọ́ gára áhya: He/she went to market.

(b) Ya' ga ahyā ...: If she goes to market ...

(c) Ọ́nye gára ahyā : He/she who went to market

(d) Kókì ná āgāhīi ọ́rụ: Koki who did not go to work.

The essence of Green and Igwe's (1963) study of Igbo verbs according to

subject verb forms is to capture the tone patterns required by specific clause types⁶ in the Igbo language. One and the same verb manifests different contextually determined tone patterns; therefore, what we have been examining here is not two different Nà's, an auxiliary Nà and a relative Ná, but one underlying auxiliary verb whose tone patterns, like those of other verbs in Igbo, are structure-specific. The high-tone Ná in relative clauses is one and the same verb as the auxiliary Nà. We have shown in 6.1.0 page 313 that relativization in Igbo will include, among others, a morphophonemic rule of Ná insertion in the appropriate structure.

10.4.2 The So-called Ná Prefix

From our paradigms of relative clauses, negative (cf 2.4.5. it has been shown that what had hitherto been analysed as a Ná prefix is indeed the same auxiliary verb iná, which is an obligatory element in negative relative clauses thus:

35(a) Ndi mēre ĥwe a gwàra ĥí' nòdí' ebe è
Those who did thing one told them stay place this:

Those who did what they were told, let them stay this side.

35(b) Ndi na ēmeññi ĥwe a gwàra ĥí' nòdí' ebe ēñi'
Those who did not thing one told them stay place that:

Those who did not do what they were told, stay that side.

36(a) Onye na āry àla, yá' nwụkwaa.
Person _who desecrates land, he die off:

Whoever desecrates our land, let him die.

(b) Onye na ānaññi àrú' àla, yá' anwùna
Person who does not desecrate land, he do not die:

Whoever does not desecrate our land, let him not die.

6 For a detailed examination of Rel. A & B clauses see Green & Igwe (1963 p. 102-104 & 130-133).

It will be observed from 35(b), which is the negative counterpart of 35(a), that relative clauses negative require an obligatory *na'* auxiliary, relative clauses whose verb is the auxiliary verb-form are no exceptions to the above rule, as 36(b) shows. We therefore conclude that

- (i) *Na'* relative, and the so-called
- (ii) *Na'* prefix

are not distinguishable from *Na'* the auxiliary verb. In the dialect being described here, the auxiliary *Na'* is an obligatory element in the verbform of all negative relative clauses, although it may be optional⁷ in the *Qhuhū* dialect described by Green and Igwe (1963).

10.4.3 *Na'* Conjunction and complementizer

In section 10.3.2 p.484-485, we have argued that there is no need to subcategorise Igbo conjunctions into co-ordinating and subordinating sets because of the overlapping in their syntactic behaviour: while some conjunctions such as *si'* and *ka'* function only as subordinators, others such as *Na'* and *ma'* may function as either co-ordinators or subordinators. For the same reasons given in the section referred to above, the distinction between complementizers (subordinators) and conjunction(co-ordinators) is not a revealing one.

We observed (cf foot note 5 p.485) that only one category of conjoined structures in Igbo requires the conjunction *na'*; this category of conjoined sentences is illustrated by the following examples 37(a-b)

- 37(a) *Nne'* *na'* *inna'*
 father and mother

⁷ In Onitsha, as in Ezinihitte, the use of this *Na'* auxiliary is obligatory. In addition to *ina'*, there is also another auxiliary verb, *idi* with about the same meaning and syntactic function as the following examples show:

- (i) *Adi* *m* *eli'* *ife:* I am eating (Onitsha)
- (ii) *Onye* *na* *adi* *eme* *ifele*
 One who is not ashamed:
 One who has no shame.

37(b) Égwu nà ócì
Joy and laughter.

Although 37(a) & (b) show that the conjunction nà occurs in the structure NP - NP, the above examples represent only surface forms which can be shown to derive from deep structure conjoined sentences via Conjunction Reduction. For example, the following 37(c-d) in which there are conjoined NPs functioning as subject have the deep structure represented by Fig.4.

37(c) Mgbaji nà dí yā bāra ūba.
Mgbaji and her husband are rich.

(d) Mā Mgbaji mā dí yā bāra ūba
Both Mgbaji and her husband are rich.

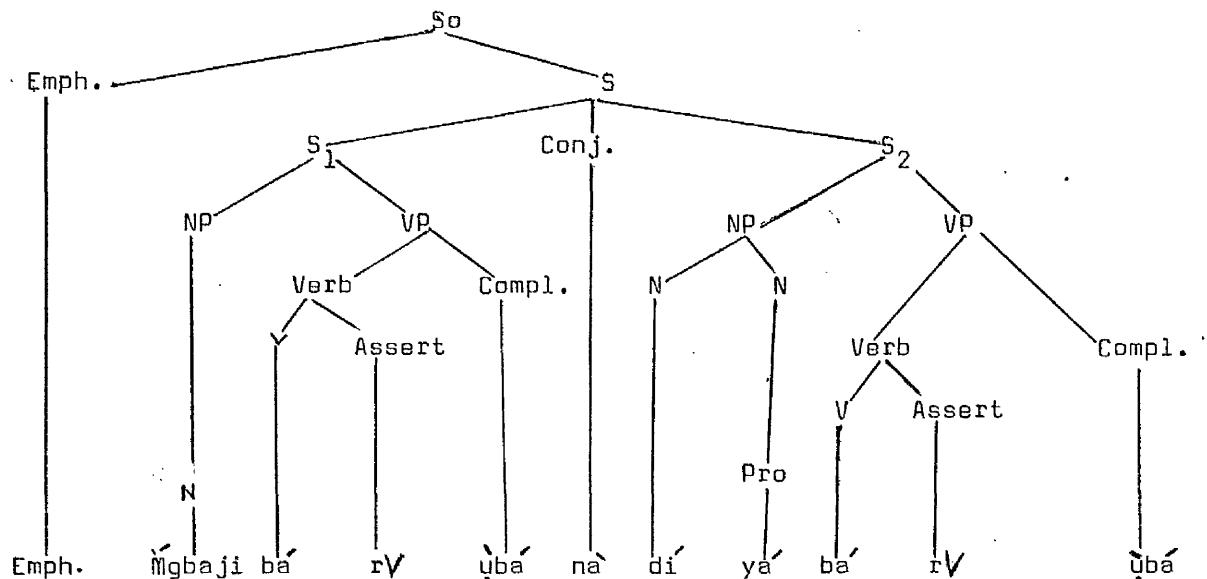


Fig. 4

The application of the rule of Conjunction reduction⁸ to the string represented in the above figure yields 37(e).

8 For a detailed discussion of the rule of conjunction reduction and allied rules, see Kotsoudas (1971) "Gapping Conjunction reduction and Co-ordinate reduction" in *Foundation of Language*, 7. See also Hudson, R.A. (Feb. 1975) "Conjunction Reduction, Gapping, Hacking, and the Preservation of Surface Structure" *Indiana University Linguistic Club*, who points out the similarities and differences between conjunction reduction and Gapping and argues that the two processes cannot be subsumed under one rule (p.6-12).

37(e) Emph. Mgbaji nà dí yá b̄ara ùbá

If the Emph node is not selected (because not necessary to the derivation of 37(c)), then the application of the relevant phonological rules to the surface structure 37(e) yields 37(c) which is given above.

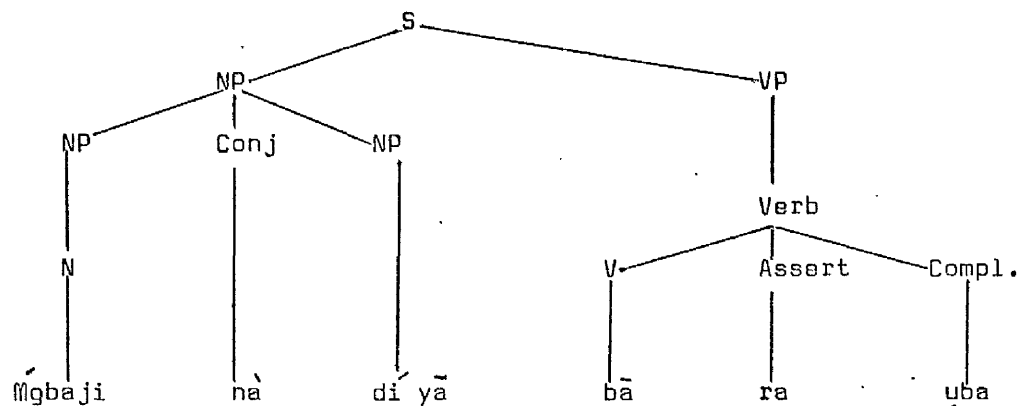


Fig. 5

In order to derive 37(d) from Fig.5, the following processes are needed:

37(e) (Emph.) Mgbaji nà dí yá b̄ara ùbá \Rightarrow (f)
 (f) M̀ Mgbaji nà dí yá b̄ara ùbá \Rightarrow (g)
 (g) M̀ Mgbaji m̀ dí yā b̄ara ùba.

37(g) is the same sentence as 37(d).

Observe that the substitution of m̀ for the node Emph. necessarily means that nà is also changed to m̀, in order to ensure the meaning of 'both and'. If we were to terminate the derivation at 37(f) we would get the following meaning:

M̀ Mgbaji nà dí yā b̄ara ùba
 Even Mgbaji and her husband are rich.

Thus 37(f), is well-formed, though not the desired 37(d).

By adopting the foregoing method, it is easy to show that there is a transformational relationship between m̀ NP (m̀) NP and NP nà NP structures in Igbo; the semantic relatedness is also captured.

Thus far, we have argued that a distinction between co-ordinating and subordinating conjunction in Igbo is not revealing and therefore unnecessary. We have also shown in 10.2.0 p. that ma₁ complementizer and ma preposition are one and the same thing in underlying structure. With regard to the Na's in Igbo, we have demonstrated (10.4.0-10.4.2 p.486-91) that the so-called Na' prefix and Na relative are all instances of the auxiliary verb ina. There remains one instance of Na - the prepositional Na - which we examine in the following section.

10.4.4 Na Preposition

In 2.2.0, p.44 - 55) we have given enough examples to illustrate the tonal behaviour of the preposition Na - the fact that it assimilates to the initial vowel and tone of the following item, if such an item begins in a vowel, or to its tone only, if it begins in a syllabic nasal. The preposition maintains its inherent low tone, if the following item begins in a consonant other than the syllabic nasal. It is only in prepositional structures that Na displays the above characteristics, a fact which marks a departure from its tonal behaviour elsewhere.

We suggest the following reasons to account for this difference of tonal behaviour. First, Igbo Prepositional phrases, unlike co-ordinate and complement structures, lack any sentential source. Secondly, a Prep. Phr. structure by its very nature is both semantically and syntactically very cohesive - the presence of the preposition head presupposes a nominal or nominal phrase, whereas the relation between a conjunction and its conjunct is much less cohesive, in fact, it is much more loose. It is also possible that the tonal peculiarity of Na as a preposition is an indication of the change which the item has undergone from one lexical category to another. To this effect, Li & Sandra Thompson (1973) have argued that present day prepositions in Mandarin Chinese were transitive verbs at earlier stages of the language. We shall take up this argument & its relevance to the Igbo language situation in section 10.4.5.

Meanwhile we assume that Na` conjunction and Na` preposition must be related in the same way that ma` conjunction and ma` preposition have been shown to be related.

10.4.5 The Auxiliary Verb Na` and Na` Conjunction and Preposition

The claim we made at the beginning of this chapter is that all these Na's in Igbo are associated with the auxiliary verb ina`. Such a claim as this is only a working hypothesis impossible of substantiation in the absence of any historical data. Much of our proof will consequently be inferential and never conclusive.

Why have we singled out the auxiliary verb ina` as the most likely sources of the Na's in Igbo? Phonetic similarity?

This is the least helpful and weakest of the criteria on which to base such a hypothesis. With its limited number of vowels (8 of them in number) and very limited pitch contrasts (two basic ones - a high and a low pitches, the third - the downstep being a marker of syntactic relation) the Igbo language abounds in homonyms. Any judgment about Igbo lexical items based on sound identity is consequently worthless. If sound identity were an important criterion, the following homonyms,

ina` - to backbite

inã - to take, receive

might have become obvious candidates. Despite their phonetic identity with the auxiliary verb in question, the two verbs above are ruled out of consideration for other overriding reasons: They are regular Igbo verbs, each with a specific meaning which is independent of context. The auxiliary verb ina`, on the other hand, does not share any of these characteristics; on the contrary, it is irregular, never occurs without another verb as complement and takes a limited range of verb inflectional suffixes. Above all, it is polysemous, any specific meaning of this auxiliary verb is in

relation to a given linguistic context, and in some contexts, it cannot even be pinned down to any particular meaning as in the following examples:

38(a) I' ga na egbu' yā egbu?

You are going killing him kill: Are you then going to kill him?

(b) Mú' na' onwe' m̄ anū̀bèle.

I and self my have not heard: I myself have not heard.

(c) Ebe na ò reele, lúfuó' yā

place that it has rotten throw away it:

Since it is rotten, throw it away.

The meaning of na in these and similar sentences depends on the totality of the meaning of each individual construction. Polysemy seems an important factor in the manifold meanings that this auxiliary verb-form Na displays from one context to another.

Recall that we have demonstrated in 4.1.5 p.198 - 203 that si the complementizer is always the second of two verbs in a serial verb construction. We have also argued in 10.2.0 that the complementizer ka must be a verb-form of the erstwhile verb kā which lacks a citation form in synchronic description. We have made a similar case for mā₁ and mā₂. Now let us see what synchronic evidence there is in support of the foregoing analysis.

Our present approach of treating conjunctions and prepositions as verb-forms reflects a general trend in present day Igbo language. There is a lot of evidence that what passes as semantically empty morphemes in other language are verb forms in Igbo sharing a lot of syntactic and semantic characteristics with existing Igbo verbs. These verb-forms which serve as relators include:

{ bhànyére gbásara }	from the compound verb	íbhànye
	" " " "	ígbàsa

- 40(a) Shi'(te) thaa' gawa' n'ihu, anyi' ga awu' enyi'
Start today go in front we shall be friends:

From today henceforth, we shall be friends.

Note the apparent Hortative/Imperative force of shite and gawa'. But in the following 40(b), the same verb-form lacks such an imperative force.

- 40(b) o' na' egbu' onwe ya shite na inu' okhe mai
He is killing self his going through from drinking much wine:

He is ruining himself by drinking too much.

If shite in 40(b) were imperative, one would expect a reflexive pronoun of the appropriate person, as in 40(c):

- 40(c) Na'(a) egbu' onwe gi shite na inu' okhe mai
Go on ruining yourself by drinking too much.

40(d) is deriant because the reflexive pronoun is not in the appropriate person.

- (d) *Na'a' egbu' onwe ya shite na inu' okhe mai
Keep on ruining himself by drinking too much.

Co-referentiality is a necessary, though not sufficient, condition for Equi-NP deletion and Reflexivization. What matters for our argument is that shite is a verb-form, and that it functions in initial position before a nominal as in a prepositional phrase.

- 41(a) Shi' (na) Ngwuru' du (na) Laagwa , o di uthi?
Start from Ngwuru reach to Laagwa it is far?
Is it far from Ngwuru to Laagwa?

- (b) Anyi' shiri Onica du Enugu na ukwu ala
We went from Onitsha reached Enugu on foot:
We went on foot from Onitsha to Enugu.

- (c) I' ma na shi' (na) Aba' du (na) Umuahya wu og'u maini abuo?
You know that start from Aba reach to Umuahya is twenty miles two?
Do you know that from Aba to Umuahya is forty miles?

The underlined items in 41(a-c) above are forms of the verbs

íshí (cl.1) to go from, pass through

ídú (cl.3) reach, arrive at.

These are verbs which take underlying prepositional phrase as complement, though the preposition na can be deleted in surface form. In 41(a) the underlined verb-forms are being used as prepositions, in (b) the form shiri is the first verb of a serial verb construction and carries the appropriate tense suffix -rV. As is the norm in serial verb construction, any subsequent verb (in this case du) does not bear any tense suffix since it copies its tense from the first verb of the series. In (c) as in (a) the two verb forms are prepositional in function. In either function, the semantic relatedness as well as the syntactic properties of the source verbs are maintained.

Now consider the following examples involving a different verb -

íbyā 'to come'

42(a) Éméchere m ĥwe niile bya { fùwá
 ifuwa }

Finished complete I things all come go out

I finished everything before going out.

42(a) can be transformed into 42(b) in which the underlined verb comes first in the series and consequently bears the tense suffix.

(b) Ábyàrà m méchee ĥwe niile fùwá
 Came I - finished... thing all went out
 I came and finished everything { and went out
 before going out }

Observe that in (b) there is no choice as between fùwá and ifuwa as in (a). This choice is possible only before the form bya. Note also that ifuwa is a derived nominal, a fact which conclusively demonstrates the prepositional function of this serial verb bya in 42(a). The following (c) & (d) are more examples of the same phenomenon:

43(b) (N)ke ya' kacha mma

That of him surpasses all in beauty: His is the most beautiful of all.

In Igbo and, probably in all typologically similar languages, verb-forms perform the most syntactic functions. Igbo syntax, one suspects, may well centre on its complex verb system and how certain verb-forms are used in various syntactic functions.

The cumulative effect of all the synchronic evidence so far given is to show that Igbo is very much a 'verb' language, that is, a language where verb-forms perform the functions that in Indo-European languages are carried out by largely meaningless function words. Such conclusive evidence as this has been made possible by the fact that all the verbs concerned are existing, regular verbs with specific meanings.

However, it can be argued, rightly, that the prepositions and conjunctions which we have shown to be verb-forms maintain the consistent meaning and syntactic characteristics of the source verbs, whereas Na in its various functions lacks such a consistency. That this is the case with Na is due to the polysemy of the auxiliary verb with which this conjunction is associated - the fact that in order to exhibit a specific meaning Na has got to be in a linguistic context.

But the auxiliary verb ina is not the only Igbo verb with this characteristic. Igbo abounds in verbs which may be considered polysemous and need a linguistic context, say an inherent complement, to specify their meaning. It is to cater for verbs of this class that our Phrase structure (PS-) Rule 4 (cf 4.2. p.204) provides for the expansion of verb as (Prefix)+V+(Suff)+(Compl.). We give a few of such verbs in order to illustrate what we mean:

44	itū	?	
	itū	utū	to pay a levy
	itū	anya	to expect

	ítu	oyi	to be cold
	"	ashi	to lie
	"	n'anya	" surprise
	"	ama	" sweep a road
	"	mai	" pour libation
	"	íkpe	" make allegation, to insinuate
	"	ji	" plant yams
	"	onu	" burrow
45	ígbā	?	
	ígbā	oso	" run
	"	moto	" drive a car, travel in a car
	"	igwè	" ride a bicycle
	"	àla	" spread rapidly (as of rumour)
	"	mkpe	" mourn
	"	mgba	" wrestle
	"	athuthu	" discriminate
	"	ughala áhya	" trade
	"	àja	" divine
	"	nguzó	" loiter

We have randomly picked on two verbs and made as many entries as we can remember after each of them. It would be difficult to talk of the meaning of verbs such as ígbā and ítu independent of their inherent complements. It is for this reason that we maintain that the citation form of such verbs must include their inherent complements. If verbs such as these had any definite meaning independent of the above linguistic contexts, (their inherent complements) they have surely acquired many more by combining with as many noun complements as possible. The tendency to maximise the use of any one lexical item, especially if such an item is a verb, is normal in human language; it is irresistible for a language

such as Igbo which does not possess the apparatus for unlimited morphological derivation. Indo-European languages, and English in particular, are fortunate in having their derivational affixes ready-made from the classical languages, which are highly synthetic. Igbo lacks such a historical relationship and is, in any case, a different language altogether. One can only wait to see how far the Igbo situation is borne out by facts from other members of the Kwa subgroup of languages.

Ansre (1966) gives a list of prepositional verbs which he describes as 'Verbids'. These are forms homophonous with and related to existing verbs in meaning. 'Verbid' is just another name for a verb-form which has taken on a prepositional function. Our contention is that certain verb-forms take on not only prepositional functions but also conjunctive ones. Coming as it does from Ewe, a member of the Kwa group, the above fact suggests that the phenomenon we are describing here is not an isolated incident or peculiar to Igbo alone.

Cross-linguistic evidence from Mandarin Chinese is definitely in line with our thinking about Igbo conjunctions and prepositions. What is significant about the Chinese situation is that the argument draws its support from both diachronic and synchronic evidence, whereas our argument about Igbo relies heavily on synchronic data. Nevertheless, the two conclusions are very similar.

As we mentioned earlier on (cf 0.4.4 p.494) Li and Thompson (1973) have argued that present day co-verbs (prepositions) in Mandarin Chinese were transitive verbs at earlier stages of the language: "The development of complex verb structures into simplex prepositional phrases is highly significant: it is the most important factor in the shift which Mandarin is presently undergoing from SVO to SOV language. In particular, we hypothesize that in the transition from verbs to prepositions, some of

these morphemes have progressed farther than others. This hypothesis enables one to account for certain types of non-homogeneity in this class of function words." (p.)

The striking parallel between Chinese prepositions (co-verbs) and the Igbo ones is that both sets originate first and foremost as serial verbs. In Mandarin Chinese, it is the first verbs in a serial verb construction which developed into prepositions, in Igbo, it is never the first, but the second or subsequent verbs. In Chinese as in Igbo, the lack of homogeneity in the forms of the prepositions is an observable fact. Some Igbo prepositions, for example, still behave very much like verbs in taking certain inflectional suffixes (-rV, for example) which are only associated with verbs. Such prepositions include gbasara and bhanyere and shi(te) with its optional -tA suffix. It could be argued, however, that the presence of these verb suffixes is not necessarily a reflection of differential rates of change, as Li and Thompson observe, but rather an indication of the semantic class of verbs involved. Being what we have described as Stative verbs (cf 4.2. p. 213-216) igbasa and ibhanye will always take the -rV Assertive suffix in the present tense. Another common factor between the two languages being compared here is the fact that for some of these prepositions and conjunctions there are no existing homophonous verbs, while for most of them there are existing verbs of the same phonemic shape and the same meaning. In the absence of any historical data, it is not easy for us to say whether or not some Igbo conjunctions and prepositions have acquired a meaning different from that of their source verbs. But what one can positively say is that the polysomy of the auxiliary verb ina makes it possible for Na to have different meanings in different contexts.

How best, then, can the relationship between certain Igbo verbs and Igbo conjunctions be captured in the analysis of the language? We are not

taking a stand on the issue whether a verb and a corresponding preposition or conjunction are one lexical item or two. According to particular theories of the lexicon, they may be described either way: the facts are that in some sentences a word of certain phonological shape is a verb, while in others it is a preposition or conjunction, and that the two forms are historically and semantically related. A similar remark can be made for such non-verb pairs in English as dance / dance, thus:

I dance every Friday evening.

I go for a dance whenever I like.

What we have done here is to capture this essential relationship in the lexicon by means of feature specifications, thus acknowledging the syntactic differences between them while at the same time recognising their similarities. For example, verbs such as ina have the following lexical entries:

<u>ina</u>
+ V
+ aux
+ verb compl.
+ conj
+ prep

Correspondingly, the Na preposition and conjunction are featurally specified respectively as follows:

Na
+ V
+ aux
- verb compl.
+ prep
- conj

Na

+ V + aux - verb compl. + conj - prep

In other words

+ verb compl.	means	- Prep - Conj
---------------	-------	------------------

or

- verb compl.	means	that the
---------------	-------	----------

features prep or conj is positively specified.

Similarly, the prepositions gbásara and bhànyére have the following features:

+ V + stative + Prep

where [+ stative] is rewritten as
the [+ rV] assertive suffix.

Whether the items being considered here are entered in the lexicon as one or two items, the essential relationship with certain verbs is still reflected in the above features.

Concluding Summary

Igbo monosyllabic conjunctions and prepositions are associated with certain Igbo verbs. Of these verbs, some are still in existence, while a few others are not. The verbs in existence include

sì	from the verb	isì	to say.
gbásara	" "	igbasa	
bhànyére		ibhanye	to concern
du	" the verb	idu	to reach, arrive at.

bya`		from the verb	íbyā`	to come
shí(te)	"	"	íshí(te)	to go/come from
Na`	"	"	auxiliary verb	ina`
Ka`	"	"	defective verb	kāā` 'please' which exists only in its Hortative form.

Those conjunctions and preposition for which there are no existing homophonous verbs are:

- (i) Ma₁` Purpose conjunction which is transformationally related to the corresponding ma` preposition.
- (ii) Ma₂` Interrogative conjunction under which we subsume mā conditional conjunction as well as the co-ordinating homophone.

We have argued (cf p. 484-486) that no distinction need be made in Igbo between subordinating and co-ordinating conjunctions.

Attention has been drawn to the parallelism existing between Igbo and Mandarin Chinese with regard to prepositions and conjunctions. In both languages, it is serial verbs which are involved: In Mandarin Chinese, historical evidence points to the fact that the first of serial verb constructions developed into prepositions, while in Igbo it is the second or subsequent verbs which have become either prepositions, or a conjunction as in the case of Sí.

It has also been shown that Igbo is very much a 'verb' language where verb-forms perform the syntactic functions which in Indo-European languages are carried out by semantically empty morphemes. These observations call for further research into languages which are typologically related to Igbo in an effort to discover how far the situation in Igbo is reflected in such languages.

APPENDIX

SAMPLE LEXICON

This section does not represent a fully worked lexicon of Igbo, nor does it contain an exposition of any theory of the lexicon. For such theories and their inherent problems the reader is referred to Chomsky (1965) and Stockwell et al (1973: 718 - 810), the latter contains a good number of references to articles on the lexicon in a transformational grammar. A sample lexicon is also provided by Carrell (1970: 32 - 46), although her entries need up-dating to reflect advances in transformational theories.

What we present here is, therefore, very short, and our lexical entries have been dictated by the examination of Igbo complementation which we have undertaken and the analysis of other aspects of Igbo which have been found relevant to Sentential complementation in Igbo.

The base of a transformational grammar is made up of the Categorical sub-component and a lexicon. The categorical sub-component consists of a context free phrase-structure grammar whose output is a string of symbols (which mark the position of lexical categories) and grammatical formatives. The lexicon is made up of an unordered set of lexical entries, each of which is an ordered pair of matrices (D,C). D is a phonological matrix which gives the necessary and sufficient information for the phonetic realisation of the items via the phonological rules; while C, represents a syntactic-semantic matrix, consisting of a collection of feature specifications of the following kinds:

- (a) Category Features
- (b) Contextual "
- (c) Inherent "
- (d) Rule "

We are not concerned with the phonological matrix D, but with the syntactic-semantic features (that is, the C matrix).

Lexical Substitution

The lexical items are inserted by a substitution transformation, where the complex symbol in the lexical entry is the structure index for the transformation. The lexical substitution rule is based on the criterion of distinctiveness, as follows:

Two sets of features are distinct if and only if they contain at least one feature with opposite values.

In principle, each vocabulary item has associated with it a complex symbol containing the features enumerated above:

Category Feature

A category feature denotes a lexical category such as noun $[+N]$, or a verb $[+V]$. In this sample lexicon, each complex symbol contains only one positive specification for each category feature. However, we adopt the following method for the categories Adjective, Preposition and Conjunction.

In the absence of any distinctive morphological and/or syntactic criteria to justify a separate lexical category, Adjective, we have decided to have only one major Category Nominal $[+N]$, whose members will fall into either of the following sub-categories:

- (a) Those nominals (traditionally described as adjectives) which do not occur alone but always restricted to the second position in an NP of the $N_1 \neq N_2$ structure,

(b) Those nominals which can function in the structural position of N_1 or N_2 given the appropriate context. Since only a small number of nominals belong to sub-category (a) above, they constitute the exception, which are consequently marked as

$$\begin{bmatrix} + N \\ + 2nd \text{ position} \end{bmatrix}$$

The majority of nominals belonging to category (b), being the norm, are unmarked.

Secondly, Prepositions and Conjunctions have been shown to be verb-forms (cf Chapter 5), they are therefore, positively specified as $[+V]$, differing from co-verbs by such features as $[+ \text{ Prep}]$ or $[+ \text{ Conj}]$. The disyllabic conjunctions thùma / khàma, màna and màka are not covered by the foregoing analysis, their relation with any Igbo verbs not being known.

Contextual Features

These features denote the linguistic context in which a lexical item occurs. For example, verbs such as inò 'to be, stay' always have the contextual feature

$$[\text{ ——— } + \text{ Locative }] ,$$

which denotes that they take only Locatives which are generally prepositional phrases.

Inherent And Rule Features : Inherent Features.

These denote qualities such as animate, human, and abstract, while Rule Features refer to the transformations to which a lexical item is subject, such as Equi, Infinitivization and Extraposition. Inherent features may be syntactic or semantic.

Feature Specification

+	means	positive specification
-	"	negative "
*	"	obligatory with regard to T-rules.

Redundancy Rules

Redundancy rules help to limit the number of feature specifications in a complex symbol whenever predictable features can be added by a general rule. For example,

$$\begin{array}{l} \left[\begin{array}{l} + N \\ + Hum \end{array} \right] \Rightarrow \left[+ Animate \right] \\ \left[\begin{array}{l} + N \\ + Abs \end{array} \right] \Rightarrow \left[\begin{array}{l} - Hum \\ - Animate \end{array} \right] \end{array}$$

Redundancy rules apply before the insertion of a lexical item in a tree.

Sample LexiconNominals

Éghu - goat

+ N
- hum
+ anim
+ count
+ common
- pers pro

Ndhú - life

+ N
+ abs
- count
- pers pro

Oshishi - tree

+ N
+ count
- anim
+ concrete
+ common
- pers pro

Qcha - white

+ N
+ abs
- count
- pers pro
+ 2nd position

Uchá - white/
whiteness

+ N
+ abs
- count
- pers pro

Qjəq̄ - bad, ugly

+ N
+ abs
- count
- pers pro
+ 2nd position

Njə - badness

+ N
+ abs
- count
- pers pro

Qma - good

+ N
+ abs
- count
- pers pro
+ 2nd position

Mma - good/goodness

+ N
+ abs
- count
- pers pro

Gbùrugbùrù - round/roundness

+ N
+ abs
- count
+ measurement
- pers pro

- short

Mkpumkpu	- short/ shortness	O'	- he/she
+ N		+ N	
+ abs		+ hum	
+ measurement		+ def	
- pers pro		+ sg	
- count		+ pers pro	
		+ 3rd	
		- self-ref.	
		+ bound	
Ogologo	- tall/ height	ya'	- it
+ N		+ N	
+ abs		+ pro	
- pers pro		+ abs	
- count		+ def	
		- loc	
Mv'	- I	Ya'	- in it, there
+ N		+ N	
+ hum		+ pro	
+ def		+ abs	
+ sg		+ loc	
+ pers pro			
- bound			
M'	- I	Anyi	- we
+ N		+ N	
+ hum		+ hum	
+ def		+ def	
+ sg		+ pl	
+ 1st		+ pers pro	
+ bound		+ 1st	
Gi'	- You (sg)	Unu	- you (pl)
+ N		+ N	
+ hum		+ hum	
+ def		+ def	
+ sg		+ pl	
+ pers pro		+ pers pro	
+ 2nd		+ 2nd	
- bound			
I'	- You	Ha'	- they (inclusive)
+ N		+ N	
+ pro		+ hum	
+ hum		+ def	
+ def		+ pl	
+ sg		+ pers pro	
+ pers pro		+ 3rd	
+ 2nd		+ inclusive	
+ bound			
Ya'	- he/she him/her	Umy	- they (exclusive)
+ N		+ N	
+ hum		+ hum	
+ def		+ def	
+ sg		+ pl	
+ pers pro		+ pers pro	
+ 3rd		+ 3rd	
+ self-ref		- inclusive	
- bound			

Verbs

Íkwū - to say,
declare

+ V

- fact

+ activity

+ S ~ {Indic
Imp
Subjunct}

Ísī - to say

+ V

- fact

+ activity

- conj

+ S ~ {Indic
Imp
Subjunct}

Ímū - to learn

+ V

+ epistemic

+ otho NP

+ Infinitivization

Ígōshī - to show,
reveal

+ V

+ fact

+ S ~ Indic — S ~ Indic

+ Relat₂

Íwē ánya - to be obvious

+ V

+ fact

+ S ~ Indic

+ Relat₂

Ícē - to think

+ V

- fact

+ S ~ {Indic
Interrog}

Ígbā águḡḡ - to argue,
doubt

+ V

- fact

+ S ~ Interrog

+ object S prepose

Íjū - (see Page 509)

Ínā nthī - to listen, to
know

+ V

- fact

+ S ~ Interrog

+ object S prepose

Ícō - to want, wish

+ V

- fact

+ forward-looking

+ S ~ Subjunct

+ Equi

+ Infinitivization

Íkhwō - to have in mind,
regard for

+ V

- fact

+ forward-looking

+ S Subjunct

+ Equi

+ Infinitivization

Íkwē nkhwa - to promise

+ V

- fact

+ forward-looking

+ S Subjunct

+ Equi

+ Infinitivization

Íkwēshī - to be worthy,
appropriate

+ V

- fact

+ emot

+ S ~ Subjunct

+ Subject-Raising

Ítōshī - to be appropriate,
right

+ V

- fact

+ emot

+ S ~ Subjunct

+ Subject-Raising

Ídī - to seem, resemble

- fact

+ emot

+ S ~ Subjunct

* Extrap

+ Subject-Raising

/~
 Inū - to seem,
 resemble
 + V
 - fact
 + emot
 + S~ Subjunct
 * Extrap
 + Subject-Raising

/~
 Irā ahu - to be difficult
 + V
 - fact
 + emot
 + S~ Interrog
 + Infinitivization

/~
 Igbāgha - to leave, abandon,
 pardon
 + V
 + activity
 + aspectual
 + — (na) infinit Nom

/~
 Ihāfu - to leave, abandon,
 + V
 + activity
 + aspectual
 + — (na) Infinit Nom

/~
 Ikwūshj - stop, desist
 from
 + V
 + activity
 + aspectual
 + — Infinitive Nom

/~
 Ijū - to ask
 + V
 - fact
 + S~ Interrog
 + object S prepose

Copulas

/~
 Idi₂ - to be
 + V
 + copula
 + stative
 + — NP

/~
 Ino - to be, stay in
 + V
 + copula
 + stative
 + — loc

/~
 Iwū - to be
 + V
 + copula
 + stative
 + — NP

Auxiliaries

/~
 Igā₁ - shall/will
 + V
 + aux
 + verb compl
 + future

/~
 Igā₂ - should
 + V
 - aux
 + modal
 + verb compl

/~
 Ijī
 + V
 + aux
 + verb compl
 + habitual

/~
 Ina
 + V
 + aux
 + verb compl
 - conj
 - prep
 + progressive
 + habitual

Na
 Prep
 + V
 + aux
 - verb compl
 - conj
 + prep

Na
 Conj
 + V
 + aux
 - verb compl
 - prep
 + conj

Conjunctions & Prepositions

Sí - that
 + V
 - fact
 + activity
 + conj

Na` Conj (see P.514)

Na` Prep (see P.514)

Ka` - that, in
 order that
 + V
 - activity
 + conj

Ma₁ Conj - that, so
 that
 + V
 - activity
 + conj
 - prep

Ma₁ Prep - for, on
 behalf
 + V
 - activity
 - conj
 + prep

Ma₂ Conj - if,
 whether
 + V
 - activity
 + conj

Ma_{ka} - for, on
 behalf of
 + prep

Ma_{na} - but
 + conj

Thú_{ma} - rather than
 instead of
 + conj

Khá_{ma} - rather than,
 instead of
 + conj

Tú_{pu} - before
 + conj
 + — S

Shí - go from, from
 + V
 + prep
 + — (ná) NP

Dú - arrive at, to
 + V
 + prep
 + — (ná) NP

Byá - before
 + V
 + conj

Gbásara - concerning,
 about
 + V
 + stative
 + prep

Bhà_{yé} - concerning,
 about
 + V
 + stative
 + prep

Determiners

(N)ke
 + det
 + substantive
 + sg

Ndi
 + det
 + substantive
 + pl

A` - this.
 + dem

Áh_y - that
 + dem

-Ma` - this, the
 + det
 + definitizer
 + Pronoun —

- Wá' - the
 + det
 + definitizer
 + NP ———

Quantifiers

Nííle - all

[+ quant]

Olémáolé' - few, several

[+ quant]

Ọtútú - many

[+ quant]

Uzugbu - all

[+ quant]

Numerals

Ọtu - one

[+ dig]

Àbúṓ - two

[+ dig]

Àtọ́ - three

[+ dig]

Ànọ́ - four

[+ dig]

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Abbreviations:

<u>ALS</u>	- <u>African Language Studies</u>
<u>BSOAS</u>	- <u>Bulletin of the School of Oriental and African Studies</u>
<u>CLS</u>	- <u>Papers from the Regional Meetings of Chicago Linguistic Society</u>
<u>FL</u>	- <u>Foundations of Language</u>
<u>IULC</u>	- <u>Indiana University Linguistic Club</u>
<u>JAL</u>	- <u>Journal of African Languages</u>
<u>JWAL</u>	- <u>Journal of West African Languages</u>
<u>JL</u>	- <u>Journal of Linguistics</u>
<u>LI</u>	- <u>Linguistic Inquiry</u>
<u>SAL</u>	- <u>Studies in African Linguistics</u>
<u>CUP</u>	- <u>Cambridge University Press</u>
<u>OUP</u>	- <u>Oxford University Press</u>

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